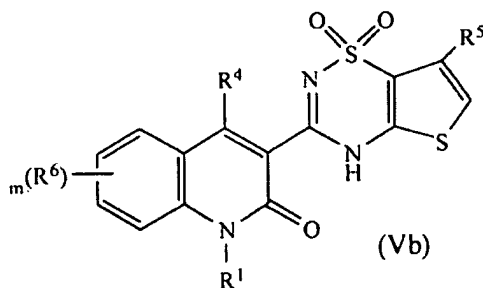


Claim Listing

1-24 (canceled)

25. (currently amended) ~~[[The]]~~ A compound or a pharmaceutically acceptable salt form, stereoisomer, or tautomer thereof, wherein:

the compound corresponds in structure to ~~of claim 1 of~~ formula (Vb):



~~or a pharmaceutically acceptable salt form, stereoisomer or tautomer thereof, wherein:~~

$R^1$  is selected from the group consisting of hydrogen, alkenyl, alkoxyalkyl, alkoxyalkylalkyl, alkyl, alkylcarbonylalkyl, alkylsulfanylalkyl, alkylsulfinylalkyl, alkylsulfonylalkyl, alkynyl, aryl, arylalkenyl, arylalkyl, arylsulfanylalkyl, arylsulfonylalkyl, carboxyalkyl, cyanoalkyl, cycloalkenyl, cycloalkenylalkyl, cycloalkyl, (cycloalkyl)alkenyl, (cycloalkyl)alkyl, formylalkyl, haloalkoxyalkyl, haloalkyl, heteroaryl, heteroarylalkenyl, heteroarylalkyl, heteroarylsulfonylalkyl, heterocycle, heterocyclealkenyl, heterocyclealkyl, hydroxyalkyl, nitroalkyl,  $R_aR_bN-$ ,  $R_aR_bNalkyl-$ ,  $R_aR_bNC(O)alkyl-$ ,  $R_aR_bNC(O)Oalkyl-$ ,  $R_aR_bNC(O)NR_calkyl-$ ,  $R_fR_gC=N-$ , and  $R_kO-$ , wherein  $R^1$  is substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(alkyl)(OR_c)$ ,  $-(alkyl)(NR_cR_e)$ ,  $-SR_c$ ,  $-S(O)R_c$ ,  $-S(O)_2R_c$ ,  $-OR_c$ ,  $-N(R_c)(R_e)$ ,  $-C(O)R_c$ ,  $-C(O)OR_{c2}$  and  $-C(O)NR_cR_e$ ;

$R^4$  is selected from the group consisting of alkoxy, arylalkoxy, aryloxy, halo, hydroxy,  $R_aR_bN-$ ,  $N_3-$ , and  $R_cS-$ , wherein  $R^4$  is substituted with 0, 1, or 2 substituents independently selected from the group consisting of halo, nitro, cyano,  $-OH$ ,  $-NH_2$ , and  $-COOH$ ;

$R^5$  is ~~independently~~ selected ~~at each occurrence~~ from the group consisting of ~~alkenyl, alkoxy, alkyl, alkynyl, aryl, arylalkyl, arylcarbonyl, aryloxy, azidoalkyl, formyl, halo, haloalkyl, halocarbonyl, heteroaryl, heteroarylalkyl, heterocycle, heterocyclealkyl, hydroxyalkyl, cycloalkyl, cyano, cyanoalkyl, nitro,  $R_aR_bN-$ ,  $R_cC(O)-$ ,  $R_cS-$ ,  $R_c(O)S-$ ,  $R_c(O)_2S-$ ,  $R_aR_bNalkyl-$ ,  $R_c(O)SN(R_f)-$ ,  $R_aSO_2N(R_f)-$ ,  $R_c(O)SN(R_f)alkyl-$ ,  $R_aSO_2N(R_f)alkyl-$ ,  $R_aR_bNSO_2N(R_f)-$ , and  $R_aR_bNSO_2N(R_f)alkyl-$ ,  $R_aR_bNC(O)-$ ,  $R_kOC(O)-$ ,  $R_kOC(O)alkyl-$ ,  $R_kOalkyl-$ ,  $R_aR_bNSO_2-$ ,  $R_aR_bNSO_2alkyl-$ ,~~

~~(R<sub>b</sub>O)(R<sub>c</sub>)P(O)O and OR<sub>a</sub>, wherein each R<sup>5</sup> is independently substituted with 0, 1, 2 or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, (alkyl)(OR<sub>c</sub>), (alkyl)(NR<sub>c</sub>R<sub>d</sub>), -SR<sub>c</sub>, -S(O)R<sub>c</sub>, -S(O)<sub>2</sub>R<sub>c</sub>, -OR<sub>c</sub>, -N(R<sub>c</sub>)(R<sub>d</sub>), -C(O)R<sub>c</sub>, -C(O)OR<sub>c</sub> and -C(O)NR<sub>c</sub>R<sub>d</sub>;~~

R<sup>6</sup> is independently selected at each occurrence from the group consisting of alkyl, alkenyl, alkynyl, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, heterocyclealkyl, -(alkyl)(OR<sub>k</sub>), -(alkyl)(NR<sub>a</sub>R<sub>b</sub>), -SR<sub>a</sub>, -S(O)R<sub>a</sub>, -S(O)<sub>2</sub>R<sub>a</sub>, -OR<sub>k</sub>, -N(R<sub>a</sub>)(R<sub>b</sub>), -C(O)R<sub>a</sub>, -C(O)OR<sub>a</sub> and -C(O)NR<sub>a</sub>R<sub>b</sub> [;]; wherein each R<sup>6</sup> is independently substituted with 0, 1, 2, 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, haloalkyl, cyano, nitro, -OR<sub>a</sub>, -NR<sub>a</sub>R<sub>b</sub>, -SR<sub>a</sub>, -SOR<sub>a</sub>, -SO<sub>2</sub>R<sub>a</sub>, -C(O)OR<sub>a</sub>, -C(O)NR<sub>a</sub>R<sub>b</sub> and -NC(O)R<sub>a</sub>;

R<sub>a</sub> and R<sub>b</sub>, at each occurrence, are independently selected from the group consisting of hydrogen, alkenyl, alkyl, alkylsulfanylalkyl, aryl, arylalkenyl, arylalkyl, cyanoalkyl, cycloalkenyl, cycloalkenylalkyl, cycloalkyl, cycloalkylalkyl, cycloalkylalkenyl, formylalkyl, haloalkyl, heteroaryl, heteroarylalkenyl, heteroarylalkyl, heterocycle, heterocyclealkenyl, heterocyclealkyl, hydroxyalkylcarbonyl, nitroalkyl, R<sub>c</sub>R<sub>d</sub>N-, ~~R<sub>c</sub>O-, R<sub>c</sub>Oalkyl-~~, R<sub>c</sub>R<sub>d</sub>Nalkyl-, R<sub>c</sub>R<sub>d</sub>NC(O)alkyl-, R<sub>c</sub>SO<sub>2</sub>-, R<sub>c</sub>SO<sub>2</sub>alkyl-, R<sub>c</sub>C(O)-, R<sub>c</sub>C(O)alkyl-, R<sub>c</sub>OC(O)-, R<sub>c</sub>OC(O)alkyl-, R<sub>c</sub>R<sub>d</sub>NalkylC(O)-, R<sub>c</sub>R<sub>d</sub>NC(O)-, R<sub>c</sub>R<sub>d</sub>NC(O)Oalkyl-, and R<sub>c</sub>R<sub>d</sub>NC(O)N(R<sub>c</sub>)alkyl-, wherein R<sub>a</sub> and R<sub>b</sub> are substituted with 0, 1, 2 substituents selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(OR<sub>c</sub>), -(alkyl)(NR<sub>c</sub>R<sub>d</sub>), -SR<sub>c</sub>, -S(O)R<sub>c</sub>, -S(O)<sub>2</sub>R<sub>c</sub>, -OR<sub>c</sub>, -N(R<sub>c</sub>)(R<sub>d</sub>), -C(O)R<sub>c</sub>, -C(O)OR<sub>c</sub> and -C(O)NR<sub>c</sub>R<sub>d</sub>;

alternatively, R<sub>a</sub> and R<sub>b</sub>, together with the nitrogen atom to which they are attached, form a three- to six-membered ring selected from the group consisting of heteroaryl and heterocycle, wherein the heteroaryl and heterocycle are independently substituted with 0, 1, 2, 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(OR<sub>c</sub>), -(alkyl)(NR<sub>c</sub>R<sub>d</sub>), -alkylSO<sub>2</sub>NR<sub>c</sub>R<sub>d</sub>, -alkylC(O)NR<sub>c</sub>R<sub>d</sub>, -SR<sub>c</sub>, -S(O)R<sub>c</sub>, -S(O)<sub>2</sub>R<sub>c</sub>, -OR<sub>c</sub>, -N(R<sub>c</sub>)(R<sub>d</sub>), -C(O)R<sub>c</sub>, -C(O)OR<sub>c</sub> and -C(O)NR<sub>c</sub>R<sub>d</sub>;

R<sub>c</sub> and R<sub>d</sub>, at each occurrence, are independently selected from the group consisting of hydrogen, -NR<sub>f</sub>R<sub>h</sub>, -OR<sub>f</sub>, -CO(R<sub>f</sub>), -SR<sub>f</sub>, -SOR<sub>f</sub>, -SO<sub>2</sub>R<sub>f</sub>, -C(O)NR<sub>f</sub>R<sub>h</sub>, -SO<sub>2</sub>NR<sub>f</sub>R<sub>h</sub>, -C(O)OR<sub>f</sub>, alkenyl, alkyl, alkynyl, cycloalkyl, cycloalkylalkyl, cycloalkenyl, cycloalkenylalkyl, aryl, arylalkyl, haloalkyl, heteroaryl, heteroarylalkyl, heterocycle, and heterocycloalkyl [;]; wherein each R<sub>c</sub> and R<sub>d</sub> is independently

substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(\text{alkyl})(\text{OR}_f)$ ,  $-(\text{alkyl})(\text{NR}_f\text{R}_h)$ ,  $-\text{SR}_f$ ,  $-\text{S}(\text{O})\text{R}_f$ ,  $-\text{S}(\text{O})_2\text{R}_f$ ,  $-\text{OR}_f$ ,  $-\text{N}(\text{R}_f)(\text{R}_h)$ ,  $-\text{C}(\text{O})\text{R}_f$ ,  $-\text{C}(\text{O})\text{OR}_f$ ,  $-\text{C}(\text{O})\text{NR}_f\text{R}_h$ ,  $-\text{C}(\text{O})\text{N}(\text{H})\text{NR}_f\text{R}_h$ ,  $-\text{N}(\text{R}_e)\text{C}(\text{O})\text{OR}_f$ ,  $-\text{N}(\text{R}_e)\text{SO}_2\text{NR}_f\text{R}_h$ ,  $-\text{N}(\text{R}_e)\text{C}(\text{O})\text{NR}_f\text{R}_h$ ,  $-\text{alkylN}(\text{R}_e)\text{C}(\text{O})\text{OR}_f$ ,  $-\text{alkylN}(\text{R}_e)\text{SO}_2\text{NR}_f\text{R}_h$ , and  $-\text{alkylN}(\text{R}_e)\text{C}(\text{O})\text{NR}_f\text{R}_h$ ;

alternatively,  $\text{R}_e$  and  $\text{R}_d$ , together with the nitrogen atom to which they are attached, form a three- to six-membered ring selected from the group consisting of heteroaryl and heterocycle, wherein the heteroaryl and heterocycle are independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(\text{alkyl})(\text{OR}_f)$ ,  $-(\text{alkyl})(\text{NR}_f\text{R}_h)$ ,  $-\text{SR}_f$ ,  $-\text{S}(\text{O})\text{R}_f$ ,  $-\text{S}(\text{O})_2\text{R}_f$ ,  $-\text{OR}_f$ ,  $-\text{N}(\text{R}_f)(\text{R}_h)$ ,  $-\text{C}(\text{O})\text{R}_f$ ,  $-\text{C}(\text{O})\text{OR}_f$  and  $-\text{C}(\text{O})\text{NR}_f\text{R}_h$ ;

$\text{R}_e$  is selected from the group consisting of hydrogen, alkenyl, alkyl, and cycloalkyl;

$\text{R}_f$ ,  $\text{R}_{g1}$  and  $\text{R}_h$ , at each occurrence, are independently selected from the group consisting of hydrogen, alkyl, alkenyl, aryl, arylalkyl, cycloalkyl, cycloalkylalkyl, cycloalkenyl, cycloalkenylalkyl, heterocycle, heterocyclealkyl, heteroaryl, and heteroarylalkyl, [;] wherein each  $\text{R}_f$ ,  $\text{R}_{g1}$  and  $\text{R}_h$  is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, cyano, halo, oxo, nitro, aryl, arylalkyl, cycloalkyl, cycloalkenyl, heterocycle, heteroaryl, heteroarylalkyl,  $-\text{OH}$ ,  $-\text{O}(\text{alkyl})$ ,  $-\text{NH}_2$ ,  $-\text{N}(\text{H})(\text{alkyl})$ ,  $-\text{N}(\text{alkyl})_2$ ,  $-\text{S}(\text{alkyl})$ ,  $-\text{S}(\text{O})(\text{alkyl})$ ,  $-\text{SO}_2\text{alkyl}$ ,  $-\text{alkyl}-\text{OH}$ ,  $-\text{alkyl}-\text{O}-\text{alkyl}$ ,  $-\text{alkylNH}_2$ ,  $-\text{alkylN}(\text{H})(\text{alkyl})$ ,  $-\text{alkylN}(\text{alkyl})_2$ ,  $-\text{alkylS}(\text{alkyl})$ ,  $-\text{alkylS}(\text{O})(\text{alkyl})$ ,  $-\text{alkylSO}_2\text{alkyl}$ ,  $-\text{N}(\text{H})\text{C}(\text{O})\text{NH}_2$ ,  $-\text{C}(\text{O})\text{OH}$ ,  $-\text{C}(\text{O})\text{O}(\text{alkyl})$ ,  $-\text{C}(\text{O})\text{alkyl}$ ,  $-\text{C}(\text{O})\text{NH}_2$ ,  $-\text{C}(\text{O})\text{NH}_2$ ,  $-\text{C}(\text{O})\text{N}(\text{H})(\text{alkyl})$ , and  $-\text{C}(\text{O})\text{N}(\text{alkyl})_2$ ;

alternatively,  $\text{R}_f$  and  $\text{R}_{g1}$  together with the carbon atom to which they are attached, form a three- to seven-membered ring selected from the group consisting of cycloalkyl, cycloalkenyl, and heterocycle;

alternatively,  $\text{R}_f$  and  $\text{R}_{h1}$  together with the nitrogen atom to which they are attached form a three- to seven-membered ring selected from the group consisting of heterocycle and heteroaryl, [;] wherein each of the heterocycle and heteroaryl is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, cyano, halo, oxo, nitro, aryl, arylalkyl, cycloalkyl, cycloalkenyl, heterocycle, heteroaryl, heteroarylalkyl,  $-\text{OH}$ ,  $-\text{O}(\text{alkyl})$ ,  $-\text{NH}_2$ ,  $-\text{N}(\text{H})(\text{alkyl})$ ,  $-\text{N}(\text{alkyl})_2$ ,  $-\text{S}(\text{alkyl})$ ,  $-\text{S}(\text{alkyl})$ ,  $-\text{S}(\text{O})(\text{alkyl})$ ,  $-\text{alkyl}-\text{OH}$ ,  $-\text{alkyl}-\text{O}-\text{alkyl}$ ,  $-\text{alkylNH}_2$ ,  $-\text{alkylN}(\text{H})(\text{alkyl})$ ,  $-\text{alkylS}(\text{alkyl})$ ,  $-\text{alkylS}(\text{O})(\text{alkyl})$ ,  $-\text{alkylSO}_2\text{alkyl}$ ,  $-\text{alkylN}(\text{alkyl})_2$ ,  $-\text{N}(\text{H})\text{C}(\text{O})\text{NH}_2$ ,  $-\text{C}(\text{O})\text{OH}$ ,  $-\text{C}(\text{O})\text{O}(\text{alkyl})$ ,  $-\text{C}(\text{O})\text{alkyl}$ ,  $-\text{C}(\text{O})\text{NH}_2$ ,  $-\text{C}(\text{O})\text{NH}_2$ ,  $-\text{C}(\text{O})\text{N}(\text{H})(\text{alkyl})$ , and  $-\text{C}(\text{O})\text{N}(\text{alkyl})_2$ ;

$\text{R}_k$  is selected from the group consisting of hydrogen, alkenyl, alkyl, aryl, arylalkyl, cyanoalkyl, cycloalkenyl, cycloalkenylalkyl, cycloalkyl, cycloalkylalkyl, formylalkyl, haloalkyl, heteroaryl,

heteroarylalkyl, heterocycle, heterocyclealkyl, nitroalkyl,  $R_aR_b$ Nalkyl-,  $R_a$ Oalkyl-,  $R_aR_b$ NC(O)-,  $R_aR_b$ NC(O)alkyl,  $R_aS$ -,  $R_aS(O)$ -,  $R_aSO_2$ -,  $R_a$ Salkyl-,  $R_a(O)$ Salkyl-,  $R_aSO_2$ alkyl-,  $R_aOC(O)$ -,  $R_aOC(O)alkyl$ -,  $R_aC(O)$ -, and  $R_aC(O)alkyl$ -, wherein each  $R_k$  is substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(alkyl)(OR_c)$ ,  $-(alkyl)(NR_cR_d)$ ,  $-SR_c$ ,  $-S(O)R_c$ ,  $-S(O)_2R_c$ ,  $-OR_c$ ,  $-N(R_c)(R_d)$ ,  $-C(O)R_c$ ,  $-C(O)OR_{c2}$  and  $-C(O)NR_cR_d$ ; and

$m$  is 0, 1, 2, 3, or 4 ‡

~~with the proviso that when  $R^4$  is hydroxy or  $R_cS$ , and  $R^6$  is hydrogen, unsubstituted alkyl, halo or  $OR_c$ , and  $R^6$  is hydrogen, alkyl, alkenyl, alkynyl, halo, cyano, nitro, aryl, heteroaryl, heterocyclealkyl,  $SR_a$ ,  $S(O)R_a$ ,  $S(O)_2R_a$ ,  $OR_a$ ,  $N(R_a)(R_b)$ ,  $C(O)R_a$ ,  $C(O)OR_a$  and  $C(O)NR_aR_b$ , then  $R^1$  is not hydrogen, alkenyl, alkyl, alkynyl, aryl, arylalkenyl, arylalkyl, cycloalkyl, (cycloalkyl)alkenyl, (cycloalkyl)alkyl, heteroaryl, heteroarylalkenyl, heteroarylalkyl, heterocyclealkenyl or heterocyclealkyl.~~

26. (currently amended) The compound, salt, stereoisomer, or tautomer of claim 25, wherein  $R^4$  is hydroxy.

27. (currently amended) The compound, salt, stereoisomer, or tautomer of claim 26, wherein  $R^1$  is selected from the group consisting of hydrogen, alkenyl, alkoxyalkyl, alkoxycarbonylalkyl, alkyl, alkynyl, arylalkenyl, arylalkyl, carboxyalkyl, cyanoalkyl, cycloalkenyl, cycloalkenylalkyl, cycloalkyl, cycloalkylalkenyl, cycloalkylalkyl, formylalkyl, haloalkyl, heteroarylalkenyl, heteroarylalkyl, heterocycle, heterocyclealkenyl, heterocyclealkyl, hydroxyalkyl,  $R_aR_bN$ -,  $R_aR_b$ Nalkyl-,  $R_aR_b$ NC(O)alkyl-,  $R_fR_gC=N$ - and  $R_kO$ -.

28. (currently amended) The compound, salt, stereoisomer, or tautomer of claim ~~21 or a pharmaceutically acceptable salt form, stereoisomer or tautomer thereof~~ 25, wherein the compound is selected from the group consisting of:

~~$N$ -({3-[1-(cyclobutylamino)-4-hydroxy-2-oxo-1,2-dihydro-3-quinolinyll-1,1-dioxido-4*H*-thieno[2,3-*c*][1,2,4]thiadiazin-7-yl)methyl}urea;~~

~~1-benzyl-4-hydroxy-3-[7-[(methoxymethoxy)methyl]-1,1-dioxido-4*H*-thieno[2,3-*c*][1,2,4]thiadiazin-3-yl]quinolin-2(1*H*)-one;~~

~~1-Benzyl-4-hydroxy-3-[7-(hydroxymethyl)-1,1-dioxido-4*H*-thieno[2,3-*c*][1,2,4]thiadiazin-3-yl]quinolin-2(1*H*)-one;~~

~~3-(1-benzyl-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl)-4H-thieno[2,3-c][1,2,4]thiadiazine-7-carboxylic acid-1,1-dioxide;~~

~~3-(1-benzyl-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl)-4H-thieno[2,3-c][1,2,4]thiadiazine-7-carboxamide-1,1-dioxide;~~

~~3-(1-benzyl-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl)-N-(2-hydroxyethyl)-4H-thieno[2,3-c][1,2,4]thiadiazine-7-carboxamide-1,1-dioxide;~~

~~3-(1-benzyl-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl)-N-[(1S)-2-hydroxy-1-(aminocarbonyl)ethyl]-4H-thieno[2,3-c][1,2,4]thiadiazine-7-carboxamide-1,1-dioxide;~~

~~N-(2-amino-2-oxoethyl)-3-(1-benzyl-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl)-4H-thieno[2,3-c][1,2,4]thiadiazine-7-carboxamide-1,1-dioxide;~~

~~3-(1-benzyl-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl)-N-[(1S)-2-hydroxy-1-methylethyl]-4H-thieno[2,3-c][1,2,4]thiadiazine-7-carboxamide-1,1-dioxide;~~

~~3-(1-benzyl-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl)-N,N-bis(2-hydroxyethyl)-4H-thieno[2,3-c][1,2,4]thiadiazine-7-carboxamide-1,1-dioxide;~~

~~3-(1-benzyl-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl)-N-[2-hydroxy-1-(hydroxymethyl)ethyl]-4H-thieno[2,3-c][1,2,4]thiadiazine-7-carboxamide-1,1-dioxide;~~

~~1-benzyl-4-hydroxy-3-(7-[(3R)-3-hydroxypyrrolidin-1-yl]carbonyl)-1,1-dioxido-4H-thieno[2,3-c][1,2,4]thiadiazin-3-yl)quinolin-2(1H)-one;~~

~~3-(1-benzyl-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl)-N-(3-hydroxypropyl)-4H-thieno[2,3-c][1,2,4]thiadiazine-7-carboxamide-1,1-dioxide;~~

~~3-(1-benzyl-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl)-N-[(2S)-2,3-dihydroxypropyl]-4H-thieno[2,3-c][1,2,4]thiadiazine-7-carboxamide-1,1-dioxide;~~

~~3-(1-benzyl-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl)-N-[(1S)-1-(hydroxymethyl)propyl]-4H-thieno[2,3-c][1,2,4]thiadiazine-7-carboxamide-1,1-dioxide;~~

~~3-(1-benzyl-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl)-N-[(1S)-1-(hydroxymethyl)-2-methylpropyl]-4H-thieno[2,3-c][1,2,4]thiadiazine-7-carboxamide-1,1-dioxide;~~

~~3-(1-benzyl-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl)-N-[2-hydroxybutyl]-4H-thieno[2,3-c][1,2,4]thiadiazine-7-carboxamide-1,1-dioxide;~~

~~3-(1-benzyl-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl)-N-[2-hydroxy-2-(4-hydroxyphenyl)ethyl]-4H-thieno[2,3-c][1,2,4]thiadiazine-7-carboxamide-1,1-dioxide;~~

~~1-benzyl-3-[1,1-dioxido-7-(piperazin-1-ylcarbonyl)-4H-thieno[2,3-c][1,2,4]thiadiazin-3-yl]-4-hydroxyquinolin-2(1H)-one;~~

~~N-[5-(aminocarbonyl)pyridin-2-yl]-3-(1-benzyl-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl)-~~

~~4H-thieno[2,3-e][1,2,4]thiadiazine-7-carboxamide-1,1-dioxide;~~

~~[3-(1-benzyl-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl)-1,1-dioxido-4H-thieno[2,3-e][1,2,4]thiadiazin-7-yl]methyl carbamate;~~

~~[3-(1-benzyl-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl)-1,1-dioxido-4H-thieno[2,3-e][1,2,4]thiadiazin-7-yl]methyl aminocarbonyl carbamate;~~

~~3-[7-(azidomethyl)-1,1-dioxido-4H-thieno[2,3-e][1,2,4]thiadiazin-3-yl]-1-benzyl-4-hydroxyquinolin-2(1H)-one;~~

~~3-[7-(aminomethyl)-1,1-dioxido-4H-thieno[2,3-e][1,2,4]thiadiazin-3-yl]-1-benzyl-4-hydroxyquinolin-2(1H)-one;~~

~~N-{{3-(1-benzyl-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl)-1,1-dioxido-4H-thieno[2,3-e][1,2,4]thiadiazin-7-yl}methyl}methanesulfonamide;~~

~~N-{{3-(1-benzyl-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl)-1,1-dioxido-4H-thieno[2,3-e][1,2,4]thiadiazin-7-yl}methyl}nicotinamide;~~

~~N-{{3-(1-benzyl-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl)-1,1-dioxido-4H-thieno[2,3-e][1,2,4]thiadiazin-7-yl}methyl}morpholine-4-carboxamide;~~

~~N-{{3-(1-benzyl-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl)-1,1-dioxido-4H-thieno[2,3-e][1,2,4]thiadiazin-7-yl}methyl}-2-hydroxyacetamide;~~

~~1-[(cyclopropylmethyl)amino]-4-hydroxy-3-[7-[(methoxymethoxy)methyl]-1,1-dioxido-4H-thieno[2,3-e][1,2,4]thiadiazin-3-yl]quinolin-2(1H)-one;~~

~~1-[(cyclopropylmethyl)amino]-4-hydroxy-3-[7-(hydroxymethyl)-1,1-dioxido-4H-thieno[2,3-e][1,2,4]thiadiazin-3-yl]quinolin-2(1H)-one;~~

~~N-[(3-{1-[(cyclopropylmethyl)amino]-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl}-1,1-dioxido-4H-thieno[2,3-e][1,2,4]thiadiazin-7-yl)methyl]methanesulfonamide;~~

~~N-[(3-{1-[(cyclopropylmethyl)amino]-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl}-1,1-dioxido-4H-thieno[2,3-e][1,2,4]thiadiazin-7-yl)methyl]ethanesulfonamide;~~

~~N-[(3-{1-[(cyclopropylmethyl)amino]-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl}-1,1-dioxido-4H-thieno[2,3-e][1,2,4]thiadiazin-7-yl)methyl]propane-1-sulfonamide;~~

~~N-[(3-{1-[(cyclopropylmethyl)amino]-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl}-1,1-dioxido-4H-thieno[2,3-e][1,2,4]thiadiazin-7-yl)methyl]propane-2-sulfonamide;~~

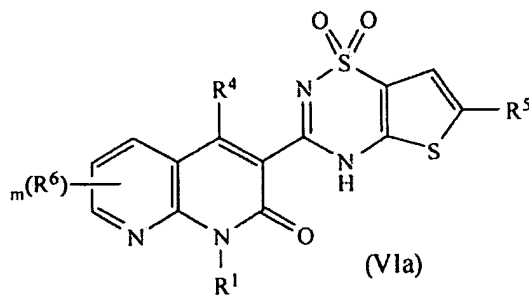
~~N-[(3-{1-[(cyclopropylmethyl)amino]-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl}-1,1-dioxido-4H-thieno[2,3-e][1,2,4]thiadiazin-7-yl)methyl]benzenesulfonamide; and~~

~~N-[(3-{1-[(cyclopropylmethyl)amino]-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl}-1,1-dioxido-4H-thieno[2,3-e][1,2,4]thiadiazin-7-yl)methyl]-1-phenylmethanesulfonamide.~~

29. (canceled)

30. (currently amended) ~~[[The]]~~ A compound or a pharmaceutically acceptable salt form, stereoisomer, or tautomer thereof, wherein:

the compound corresponds in structure to ~~of claim 1~~ of formula (VIa):



~~or a pharmaceutically acceptable salt form, stereoisomer or tautomer thereof, wherein:~~

$R^1$  is selected from the group consisting of hydrogen, alkenyl, alkoxyalkyl, alkoxycarbonylalkyl, alkyl, alkylcarbonylalkyl, alkylsulfanylalkyl, alkylsulfinylalkyl, alkylsulfonylalkyl, alkynyl, aryl, arylalkenyl, arylalkyl, arylsulfanylalkyl, arylsulfonylalkyl, carboxyalkyl, cyanoalkyl, cycloalkenyl, cycloalkenylalkyl, cycloalkyl, (cycloalkyl)alkenyl, (cycloalkyl)alkyl, formylalkyl, haloalkoxyalkyl, haloalkyl, heteroaryl, heteroarylalkenyl, heteroarylalkyl, heteroarylsulfonylalkyl, heterocycle, heterocyclealkenyl, heterocyclealkyl, hydroxyalkyl, nitroalkyl,  $R_aR_bN-$ ,  $R_aR_bNalkyl-$ ,  $R_aR_bNC(O)alkyl-$ ,  $R_aR_bNC(O)Oalkyl-$ ,  $R_aR_bNC(O)NR_calkyl-$ ,  $R_1R_2C=N-$ , and  $R_kO-$ , wherein  $R^1$  is substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(alkyl)(OR_c)$ ,  $-(alkyl)(NR_cR_c)$ ,  $-SR_c$ ,  $-S(O)R_c$ ,  $-S(O)_2R_c$ ,  $-OR_c$ ,  $-N(R_c)(R_c)$ ,  $-C(O)R_c$ ,  $-C(O)OR_c$ , and  $-C(O)NR_cR_c$ ;

$R^4$  is selected from the group consisting of alkoxy, arylalkoxy, aryloxy, halo, hydroxy,  $R_aR_bN-$ ,  $N_3-$ , and  $R_cS-$ , wherein  $R^4$  is substituted with 0, 1, or 2 substituents independently selected from the group consisting of halo, nitro, cyano,  $-OH$ ,  $-NH_2$ , and  $-COOH$ ;

$R^5$  is ~~independently selected at each occurrence~~ from the group consisting of ~~alkenyl, alkoxy, alkyl, alkynyl, aryl, arylalkyl, arylcarbonyl, aryloxy, azidoalkyl, formyl, halo, haloalkyl, halocarbonyl, heteroaryl, heteroarylalkyl, heterocycle, heterocyclealkyl, hydroxyalkyl, cycloalkyl, cyano, cyanoalkyl, nitro,  $R_aR_bN-$ ,  $R_cC(O)-$ ,  $R_cS-$ ,  $R_c(O)S-$ ,  $R_c(O)_2S-$ ,  $R_aR_bNalkyl-$ ,  $R_c(O)SN(R_f)-$ ,  $R_aSO_2N(R_f)-$ ,  $R_c(O)SN(R_f)alkyl-$ ,  $R_aSO_2N(R_f)alkyl-$ ,  $R_aR_bNSO_2N(R_f)-$ , and  $R_aR_bNSO_2N(R_f)alkyl-$ ,  $R_aR_bNC(O)-$ ,  $R_kOC(O)-$ ,  $R_kOC(O)alkyl-$ ,  $R_kOalkyl-$ ,  $R_aR_bNSO_2-$ ,  $R_aR_bNSO_2alkyl-$ ,~~

~~(R<sub>b</sub>O)(R<sub>c</sub>)P(O)O and OR<sub>k</sub>, wherein each R<sup>5</sup> is independently substituted with 0, 1, 2 or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, (alkyl)(OR<sub>k</sub>), (alkyl)(NR<sub>a</sub>R<sub>b</sub>), -SR<sub>a</sub>, -S(O)R<sub>a</sub>, -S(O)<sub>2</sub>R<sub>a</sub>, -OR<sub>k</sub>, -N(R<sub>a</sub>)(R<sub>b</sub>), -C(O)R<sub>a</sub>, -C(O)OR<sub>a</sub> and -C(O)NR<sub>a</sub>R<sub>b</sub>;~~

R<sup>6</sup> is independently selected at each occurrence from the group consisting of alkyl, alkenyl, alkynyl, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, heterocyclealkyl, -(alkyl)(OR<sub>k</sub>), -(alkyl)(NR<sub>a</sub>R<sub>b</sub>), -SR<sub>a</sub>, -S(O)R<sub>a</sub>, -S(O)<sub>2</sub>R<sub>a</sub>, -OR<sub>k</sub>, -N(R<sub>a</sub>)(R<sub>b</sub>), -C(O)R<sub>a</sub>, -C(O)OR<sub>aa</sub> and -C(O)NR<sub>a</sub>R<sub>bb</sub> [[:]] wherein each R<sup>6</sup> is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, haloalkyl, cyano, nitro, -OR<sub>a</sub>, -NR<sub>a</sub>R<sub>b</sub>, -SR<sub>a</sub>, -SOR<sub>a</sub>, -SO<sub>2</sub>R<sub>a</sub>, -C(O)OR<sub>a</sub>, -C(O)NR<sub>a</sub>R<sub>bb</sub> and -NC(O)R<sub>a</sub>;

R<sub>a</sub> and R<sub>b</sub>, at each occurrence, are independently selected from the group consisting of hydrogen, alkenyl, alkyl, alkylsulfanylalkyl, aryl, arylalkenyl, arylalkyl, cyanoalkyl, cycloalkenyl, cycloalkenylalkyl, cycloalkyl, cycloalkylalkyl, cycloalkylalkenyl, formylalkyl, haloalkyl, heteroaryl, heteroarylalkenyl, heteroarylalkyl, heterocycle, heterocyclealkenyl, heterocyclealkyl, hydroxyalkylcarbonyl, nitroalkyl, R<sub>c</sub>R<sub>d</sub>N-, ~~R<sub>c</sub>O-R<sub>c</sub>Oalkyl-~~, R<sub>c</sub>R<sub>d</sub>Nalkyl-, R<sub>c</sub>R<sub>d</sub>NC(O)alkyl-, R<sub>c</sub>SO<sub>2</sub>-, R<sub>c</sub>SO<sub>2</sub>alkyl-, R<sub>c</sub>C(O)-, R<sub>c</sub>C(O)alkyl-, R<sub>c</sub>OC(O)-, R<sub>c</sub>OC(O)alkyl-, R<sub>c</sub>R<sub>d</sub>NalkylC(O)-, R<sub>c</sub>R<sub>d</sub>NC(O)-, R<sub>c</sub>R<sub>d</sub>NC(O)Oalkyl-, and R<sub>c</sub>R<sub>d</sub>NC(O)N(R<sub>c</sub>)alkyl-, wherein R<sub>a</sub> and R<sub>b</sub> are substituted with 0, 1, or 2 substituents selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(OR<sub>c</sub>), -(alkyl)(NR<sub>c</sub>R<sub>d</sub>), -SR<sub>c</sub>, -S(O)R<sub>c</sub>, -S(O)<sub>2</sub>R<sub>c</sub>, -OR<sub>c</sub>, -N(R<sub>c</sub>)(R<sub>d</sub>), -C(O)R<sub>c</sub>, -C(O)OR<sub>c</sub> and -C(O)NR<sub>c</sub>R<sub>d</sub>;

alternatively, R<sub>a</sub> and R<sub>b</sub>, together with the nitrogen atom to which they are attached, form a three- to six-membered ring selected from the group consisting of heteroaryl and heterocycle, wherein the heteroaryl and heterocycle are independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(OR<sub>c</sub>), -(alkyl)(NR<sub>c</sub>R<sub>d</sub>), -alkylSO<sub>2</sub>NR<sub>c</sub>R<sub>d</sub>, -alkylC(O)NR<sub>c</sub>R<sub>d</sub>, -SR<sub>c</sub>, -S(O)R<sub>c</sub>, -S(O)<sub>2</sub>R<sub>c</sub>, -OR<sub>c</sub>, -N(R<sub>c</sub>)(R<sub>d</sub>), -C(O)R<sub>c</sub>, -C(O)OR<sub>c</sub> and -C(O)NR<sub>c</sub>R<sub>d</sub>;

R<sub>c</sub> and R<sub>d</sub>, at each occurrence, are independently selected from the group consisting of hydrogen, -NR<sub>f</sub>R<sub>h</sub>, -OR<sub>f</sub>, -CO(R<sub>f</sub>), -SR<sub>f</sub>, -SOR<sub>f</sub>, -SO<sub>2</sub>R<sub>f</sub>, -C(O)NR<sub>f</sub>R<sub>h</sub>, -SO<sub>2</sub>NR<sub>f</sub>R<sub>h</sub>, -C(O)OR<sub>f</sub>, alkenyl, alkyl, alkynyl, cycloalkyl, cycloalkylalkyl, cycloalkenyl, cycloalkenylalkyl, aryl, arylalkyl, haloalkyl, heteroaryl, heteroarylalkyl, heterocycle, and heterocycloalkyl, [[:]] wherein each R<sub>c</sub> and R<sub>d</sub> is independently



substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(\text{alkyl})(\text{OR}_f)$ ,  $-(\text{alkyl})(\text{NR}_f\text{R}_h)$ ,  $-\text{SR}_f$ ,  $-\text{S}(\text{O})\text{R}_f$ ,  $-\text{S}(\text{O})_2\text{R}_f$ ,  $-\text{OR}_f$ ,  $-\text{N}(\text{R}_f)(\text{R}_h)$ ,  $-\text{C}(\text{O})\text{R}_f$ ,  $-\text{C}(\text{O})\text{OR}_f$ ,  $-\text{C}(\text{O})\text{NR}_f\text{R}_h$ ,  $-\text{C}(\text{O})\text{N}(\text{H})\text{NR}_f\text{R}_h$ ,  $-\text{N}(\text{R}_e)\text{C}(\text{O})\text{OR}_f$ ,  $-\text{N}(\text{R}_e)\text{SO}_2\text{NR}_f\text{R}_h$ ,  $-\text{N}(\text{R}_e)\text{C}(\text{O})\text{NR}_f\text{R}_h$ ,  $-\text{alkylN}(\text{R}_e)\text{C}(\text{O})\text{OR}_f$ ,  $-\text{alkylN}(\text{R}_e)\text{SO}_2\text{NR}_f\text{R}_h$ , and  $-\text{alkylN}(\text{R}_e)\text{C}(\text{O})\text{NR}_f\text{R}_h$ .

alternatively,  $\text{R}_e$  and  $\text{R}_d$ , together with the nitrogen atom to which they are attached, form a three- to six-membered ring selected from the group consisting of heteroaryl and heterocycle, wherein the heteroaryl and heterocycle are independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(\text{alkyl})(\text{OR}_f)$ ,  $-(\text{alkyl})(\text{NR}_f\text{R}_h)$ ,  $-\text{SR}_f$ ,  $-\text{S}(\text{O})\text{R}_f$ ,  $-\text{S}(\text{O})_2\text{R}_f$ ,  $-\text{OR}_f$ ,  $-\text{N}(\text{R}_f)(\text{R}_h)$ ,  $-\text{C}(\text{O})\text{R}_f$ ,  $-\text{C}(\text{O})\text{OR}_f$  and  $-\text{C}(\text{O})\text{NR}_f\text{R}_h$ ;

$\text{R}_e$  is selected from the group consisting of hydrogen, alkenyl, alkyl, and cycloalkyl;

$\text{R}_f$ ,  $\text{R}_{f2}$  and  $\text{R}_h$ , at each occurrence, are independently selected from the group consisting of hydrogen, alkyl, alkenyl, aryl, arylalkyl, cycloalkyl, cycloalkylalkyl, cycloalkenyl, cycloalkenylalkyl, heterocycle, heterocyclealkyl, heteroaryl, and heteroarylalkyl, [;] wherein each  $\text{R}_f$ ,  $\text{R}_{f2}$ , and  $\text{R}_h$  is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, cyano, halo, oxo, nitro, aryl, arylalkyl, cycloalkyl, cycloalkenyl, heterocycle, heteroaryl, heteroarylalkyl,  $-\text{OH}$ ,  $-\text{O}(\text{alkyl})$ ,  $-\text{NH}_2$ ,  $-\text{N}(\text{H})(\text{alkyl})$ ,  $-\text{N}(\text{alkyl})_2$ ,  $-\text{S}(\text{alkyl})$ ,  $-\text{S}(\text{O})(\text{alkyl})$ ,  $-\text{SO}_2\text{alkyl}$ ,  $-\text{alkyl}-\text{OH}$ ,  $-\text{alkyl}-\text{O}-\text{alkyl}$ ,  $-\text{alkylNH}_2$ ,  $-\text{alkylN}(\text{H})(\text{alkyl})$ ,  $-\text{alkylN}(\text{alkyl})_2$ ,  $-\text{alkylS}(\text{alkyl})$ ,  $-\text{alkylS}(\text{O})(\text{alkyl})$ ,  $-\text{alkylSO}_2\text{alkyl}$ ,  $-\text{N}(\text{H})\text{C}(\text{O})\text{NH}_2$ ,  $-\text{C}(\text{O})\text{OH}$ ,  $-\text{C}(\text{O})\text{O}(\text{alkyl})$ ,  $-\text{C}(\text{O})\text{alkyl}$ ,  $-\text{C}(\text{O})\text{NH}_2$ ,  $-\text{C}(\text{O})\text{NH}_2$ ,  $-\text{C}(\text{O})\text{N}(\text{H})(\text{alkyl})$ , and  $-\text{C}(\text{O})\text{N}(\text{alkyl})_2$ ;

alternatively,  $\text{R}_f$  and  $\text{R}_{f2}$  together with the carbon atom to which they are attached, form a three- to seven-membered ring selected from the group consisting of cycloalkyl, cycloalkenyl, and heterocycle;

alternatively,  $\text{R}_f$  and  $\text{R}_{h2}$  together with the nitrogen atom to which they are attached, form a three- to seven-membered ring selected from the group consisting of heterocycle and heteroaryl, [;] wherein each of the heterocycle and heteroaryl is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, cyano, halo, oxo, nitro, aryl, arylalkyl, cycloalkyl, cycloalkenyl, heterocycle, heteroaryl, heteroarylalkyl,  $-\text{OH}$ ,  $-\text{O}(\text{alkyl})$ ,  $-\text{NH}_2$ ,  $-\text{N}(\text{H})(\text{alkyl})$ ,  $-\text{N}(\text{alkyl})_2$ ,  $-\text{S}(\text{alkyl})$ ,  $-\text{S}(\text{alkyl})$ ,  $-\text{S}(\text{O})(\text{alkyl})$ ,  $-\text{alkyl}-\text{OH}$ ,  $-\text{alkyl}-\text{O}-\text{alkyl}$ ,  $-\text{alkylNH}_2$ ,  $-\text{alkylN}(\text{H})(\text{alkyl})$ ,  $-\text{alkylS}(\text{alkyl})$ ,  $-\text{alkylS}(\text{O})(\text{alkyl})$ ,  $-\text{alkylSO}_2\text{alkyl}$ ,  $-\text{alkylN}(\text{alkyl})_2$ ,  $-\text{N}(\text{H})\text{C}(\text{O})\text{NH}_2$ ,  $-\text{C}(\text{O})\text{OH}$ ,  $-\text{C}(\text{O})\text{O}(\text{alkyl})$ ,  $-\text{C}(\text{O})\text{alkyl}$ ,  $-\text{C}(\text{O})\text{NH}_2$ ,  $-\text{C}(\text{O})\text{NH}_2$ ,  $-\text{C}(\text{O})\text{N}(\text{H})(\text{alkyl})$ , and  $-\text{C}(\text{O})\text{N}(\text{alkyl})_2$ ;

$\text{R}_k$  is selected from the group consisting of hydrogen, alkenyl, alkyl, aryl, arylalkyl, cyanoalkyl, cycloalkenyl, cycloalkenylalkyl, cycloalkyl, cycloalkylalkyl, formylalkyl, haloalkyl, heteroaryl,

heteroarylalkyl, heterocycle, heterocyclealkyl, nitroalkyl,  $R_aR_bNalkyl-$ ,  $R_aOalkyl-$ ,  $R_aR_bNC(O)-$ ,  $R_aR_bNC(O)alkyl$ ,  $R_aS-$ ,  $R_aS(O)-$ ,  $R_aSO_2-$ ,  $R_aSalkyl-$ ,  $R_a(O)Salkyl-$ ,  $R_aSO_2alkyl-$ ,  $R_aOC(O)-$ ,  $R_aOC(O)alkyl-$ ,  $R_aC(O)-$ , and  $R_aC(O)alkyl-$ , wherein each  $R_k$  is substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(alkyl)(OR_c)$ ,  $-(alkyl)(NR_cR_d)$ ,  $-SR_c$ ,  $-S(O)R_c$ ,  $-S(O)_2R_c$ ,  $-OR_c$ ,  $-N(R_c)(R_d)$ ,  $-C(O)R_c$ ,  $-C(O)OR_c$ , and  $-C(O)NR_cR_d$ ; and

$m$  is 0, 1, 2, 3, or 4 ‡

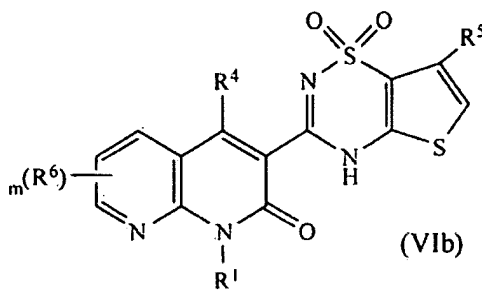
~~with the proviso that  $R^4$  is alkoxy, aryloxy, hydroxy or  $R_cS-$ , and  $R^5$  is hydrogen, alkenyl, alkoxy, alkyl, alkynyl, aryl, halo, heteroaryl, heterocyclealkyl, cycloalkyl, cyano, nitro,  $R_aR_bN-$ ,  $R_aC(O)-$ ,  $R_aS-$ ,  $R_a(O)S-$ ,  $R_a(O)_2S-$ ,  $R_aSO_2N(R_c)$ ,  $R_aR_bNC(O)-$ ,  $R_kOC(O)-$ ,  $R_aR_bNSO_2-$  or  $OR_c$ , and  $R^6$  is hydrogen, alkyl, alkenyl, alkynyl, halo, cyano, nitro, aryl, heteroaryl, heterocyclealkyl,  $-SR_c$ ,  $-S(O)R_c$ ,  $-S(O)_2R_c$ ,  $-OR_c$ ,  $-N(R_c)(R_d)$ ,  $-C(O)R_c$ ,  $-C(O)OR_c$  and  $-C(O)NR_cR_d$ , then  $R^4$  is not hydrogen, alkenyl, alkyl, alkynyl, aryl, arylalkenyl, arylalkyl, cycloalkyl, (cycloalkyl)alkenyl, (cycloalkyl)alkyl, heteroaryl, heteroarylalkenyl, heteroarylalkyl, heterocyclealkenyl or heterocyclealkyl.~~

31. (currently amended) The compound, salt, stereoisomer, or tautomer of claim 30, wherein  $R^4$  is hydroxy.

32. (currently amended) The compound, salt, stereoisomer, or tautomer of claim 31, wherein  $R^1$  is selected from the group consisting of hydrogen, alkenyl, alkoxyalkyl, alkoxycarbonylalkyl, alkyl, alkynyl, arylalkenyl, arylalkyl, carboxyalkyl, cyanoalkyl, cycloalkenyl, cycloalkenylalkyl, cycloalkyl, cycloalkylalkenyl, cycloalkylalkyl, formylalkyl, haloalkyl, heteroarylalkenyl, heteroarylalkyl, heterocycle, heterocyclealkenyl, heterocyclealkyl, hydroxyalkyl,  $R_aR_bN-$ ,  $R_aR_bNalkyl-$ ,  $R_aR_bNC(O)alkyl-$ ,  $R_lR_kC=N-$ , and  $R_kO-$ .

33. (currently amended) [[The]] A compound or a pharmaceutically acceptable salt form, stereoisomer, or tautomer thereof, wherein:

the compound corresponds in structure to ~~of claim 1~~ of formula (VIb):



~~or a pharmaceutically acceptable salt form, stereoisomer or tautomer thereof, wherein:~~

$R^1$  is selected from the group consisting of hydrogen, alkenyl, alkoxyalkyl, alkoxycarbonylalkyl, alkyl, alkylcarbonylalkyl, alkylsulfanylalkyl, alkylsulfinylalkyl, alkylsulfonylalkyl, alkynyl, aryl, arylalkenyl, arylalkyl, arylsulfanylalkyl, arylsulfonylalkyl, carboxyalkyl, cyanoalkyl, cycloalkenyl, cycloalkenylalkyl, cycloalkyl, (cycloalkyl)alkenyl, (cycloalkyl)alkyl, formylalkyl, haloalkoxyalkyl, haloalkyl, heteroaryl, heteroarylalkenyl, heteroarylalkyl, heteroarylsulfonylalkyl, heterocycle, heterocyclealkenyl, heterocyclealkyl, hydroxyalkyl, nitroalkyl,  $R_aR_bN-$ ,  $R_aR_bNalkyl-$ ,  $R_aR_bNC(O)alkyl-$ ,  $R_aR_bNC(O)Oalkyl-$ ,  $R_aR_bNC(O)NR_calkyl-$ ,  $R_rR_gC=N-$ , and  $R_kO-$ , wherein  $R^1$  is substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(alkyl)(OR_c)$ ,  $-(alkyl)(NR_cR_e)$ ,  $-SR_c$ ,  $-S(O)R_c$ ,  $-S(O)_2R_c$ ,  $-OR_c$ ,  $-N(R_c)(R_e)$ ,  $-C(O)R_c$ ,  $-C(O)OR_{c2}$  and  $-C(O)NR_eR_i$ ;

$R^4$  is selected from the group consisting of alkoxy, arylalkoxy, aryloxy, halo, hydroxy,  $R_aR_bN-$ ,  $N_3-$ , and  $R_cS-$ , wherein  $R^4$  is substituted with 0, 1, or 2 substituents independently selected from the group consisting of halo, nitro, cyano,  $-OH$ ,  $-NH_2$ , and  $-COOH$ ;

$R^5$  is ~~independently~~ selected ~~at each occurrence~~ from the group consisting of ~~alkenyl, alkoxy, alkyl, alkynyl, aryl, arylalkyl, arylcarbonyl, aryloxy, azidoalkyl, formyl, halo, haloalkyl, haloalkoxy, haloalkyl, heteroaryl, heteroarylalkyl, heterocycle, heterocyclealkyl, hydroxyalkyl, cycloalkyl, cyano, cyanoalkyl, nitro,  $R_aR_bN-$ ,  $R_cC(O)-$ ,  $R_cS-$ ,  $R_c(O)S-$ ,  $R_c(O)_2S-$ ,  $R_aR_bNalkyl-$ ,  $R_c(O)SN(R_f)-$ ,  $R_aSO_2N(R_f)-$ ,  $R_c(O)SN(R_f)alkyl-$ ,  $R_aSO_2N(R_f)alkyl-$ ,  $R_aR_bNSO_2N(R_f)-$ , and  $R_aR_bNSO_2N(R_f)alkyl-$ ,  $R_aR_bNC(O)-$ ,  $R_kOC(O)-$ ,  $R_kOC(O)alkyl-$ ,  $R_kOalkyl-$ ,  $R_aR_bNSO_2-$ ,  $R_aR_bNSO_2alkyl-$ ,  $(R_aO)(R_b)P(O)O-$  and  $OR_k$ , wherein each  $R^5$  is independently substituted with 0, 1, 2 or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl,~~

~~alkoxyalkoxyalkyl, -(alkyl)(OR<sub>c</sub>), -(alkyl)(NR<sub>c</sub>R<sub>d</sub>), -SR<sub>c</sub>, -S(O)R<sub>c</sub>, -S(O)<sub>2</sub>R<sub>c</sub>, -OR<sub>c</sub>, -N(R<sub>c</sub>)(R<sub>d</sub>),  
-C(O)R<sub>c</sub>, -C(O)OR<sub>c</sub> and -C(O)NR<sub>c</sub>R<sub>d</sub>;~~

R<sup>6</sup> is independently selected at each occurrence from the group consisting of alkyl, alkenyl, alkynyl, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, heterocyclealkyl, -(alkyl)(OR<sub>k</sub>), -(alkyl)(NR<sub>a</sub>R<sub>b</sub>), -SR<sub>a</sub>, -S(O)R<sub>a</sub>, -S(O)<sub>2</sub>R<sub>a</sub>, -OR<sub>k</sub>, -N(R<sub>a</sub>)(R<sub>b</sub>), -C(O)R<sub>a</sub>, -C(O)OR<sub>a</sub> and -C(O)NR<sub>a</sub>R<sub>b</sub> [;] wherein each R<sup>6</sup> is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, haloalkyl, cyano, nitro, -OR<sub>a</sub>, -NR<sub>a</sub>R<sub>b</sub>, -SR<sub>a</sub>, -SOR<sub>a</sub>, -SO<sub>2</sub>R<sub>a</sub>, -C(O)OR<sub>a</sub>, -C(O)NR<sub>a</sub>R<sub>b</sub> and -NC(O)R<sub>a</sub>;

R<sub>a</sub> and R<sub>b</sub>, at each occurrence, are independently selected from the group consisting of hydrogen, alkenyl, alkyl, alkylsulfanylalkyl, aryl, arylalkenyl, arylalkyl, cyanoalkyl, cycloalkenyl, cycloalkenylalkyl, cycloalkyl, cycloalkylalkyl, cycloalkylalkenyl, formylalkyl, haloalkyl, heteroaryl, heteroarylalkenyl, heteroarylalkyl, heterocycle, heterocyclealkenyl, heterocyclealkyl, hydroxyalkylcarbonyl, nitroalkyl, R<sub>c</sub>R<sub>d</sub>N-, ~~R<sub>c</sub>O-R<sub>c</sub>alkyl~~, R<sub>c</sub>R<sub>d</sub>Nalkyl-, R<sub>c</sub>R<sub>d</sub>NC(O)alkyl-, R<sub>c</sub>SO<sub>2</sub>-, R<sub>c</sub>SO<sub>2</sub>alkyl-, R<sub>c</sub>C(O)-, R<sub>c</sub>C(O)alkyl-, R<sub>c</sub>OC(O)-, R<sub>c</sub>OC(O)alkyl-, R<sub>c</sub>R<sub>d</sub>NalkylC(O)-, R<sub>c</sub>R<sub>d</sub>NC(O)-, R<sub>c</sub>R<sub>d</sub>NC(O)Oalkyl-, and R<sub>c</sub>R<sub>d</sub>NC(O)N(R<sub>c</sub>)alkyl-, wherein R<sub>a</sub> and R<sub>b</sub> are substituted with 0, 1, or 2 substituents selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(OR<sub>c</sub>), -(alkyl)(NR<sub>c</sub>R<sub>d</sub>), -SR<sub>c</sub>, -S(O)R<sub>c</sub>, -S(O)<sub>2</sub>R<sub>c</sub>, -OR<sub>c</sub>, -N(R<sub>c</sub>)(R<sub>d</sub>), -C(O)R<sub>c</sub>, -C(O)OR<sub>c</sub> and -C(O)NR<sub>c</sub>R<sub>d</sub>;

alternatively, R<sub>a</sub> and R<sub>b</sub>, together with the nitrogen atom to which they are attached, form a three- to six-membered ring selected from the group consisting of heteroaryl and heterocycle, wherein the heteroaryl and heterocycle are independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(OR<sub>c</sub>), -(alkyl)(NR<sub>c</sub>R<sub>d</sub>), -alkylSO<sub>2</sub>NR<sub>c</sub>R<sub>d</sub>, -alkylC(O)NR<sub>c</sub>R<sub>d</sub>, -SR<sub>c</sub>, -S(O)R<sub>c</sub>, -S(O)<sub>2</sub>R<sub>c</sub>, -OR<sub>c</sub>, -N(R<sub>c</sub>)(R<sub>d</sub>), -C(O)R<sub>c</sub>, -C(O)OR<sub>c</sub> and -C(O)NR<sub>c</sub>R<sub>d</sub>;

R<sub>c</sub> and R<sub>d</sub>, at each occurrence, are independently selected from the group consisting of hydrogen, -NR<sub>f</sub>R<sub>h</sub>, -OR<sub>f</sub>, -CO(R<sub>f</sub>), -SR<sub>f</sub>, -SOR<sub>f</sub>, -SO<sub>2</sub>R<sub>f</sub>, -C(O)NR<sub>f</sub>R<sub>h</sub>, -SO<sub>2</sub>NR<sub>f</sub>R<sub>h</sub>, -C(O)OR<sub>f</sub>, alkenyl, alkyl, alkynyl, cycloalkyl, cycloalkylalkyl, cycloalkenyl, cycloalkenylalkyl, aryl, arylalkyl, haloalkyl, heteroaryl, heteroarylalkyl, heterocycle, and heterocycloalkyl [;] wherein each R<sub>c</sub> and R<sub>d</sub> is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(OR<sub>f</sub>), -(alkyl)(NR<sub>f</sub>R<sub>h</sub>), -SR<sub>f</sub>, -S(O)R<sub>f</sub>, -S(O)<sub>2</sub>R<sub>f</sub>, -OR<sub>f</sub>,

$-N(R_f)(R_h)$ ,  $-C(O)R_f$ ,  $-C(O)OR_f$ ,  $-C(O)NR_fR_h$ ,  $-C(O)N(H)NR_fR_h$ ,  $-N(R_e)C(O)OR_f$ ,  $-N(R_e)SO_2NR_fR_h$ ,  
 $-N(R_e)C(O)NR_fR_h$ ,  $-alkylN(R_e)C(O)OR_f$ ,  $-alkylN(R_e)SO_2NR_fR_h$ , and  $-alkylN(R_e)C(O)NR_fR_h$ ;

alternatively,  $R_e$  and  $R_d$ , together with the nitrogen atom to which they are attached, form a three- to six-membered ring selected from the group consisting of heteroaryl and heterocycle, wherein the heteroaryl and heterocycle are independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(alkyl)(OR_f)$ ,  $-(alkyl)(NR_fR_h)$ ,  $-SR_f$ ,  $-S(O)R_f$ ,  $-S(O)_2R_f$ ,  $-OR_f$ ,  $-N(R_f)(R_h)$ ,  $-C(O)R_f$ ,  $-C(O)OR_f$  and  $-C(O)NR_fR_h$ ;

$R_e$  is selected from the group consisting of hydrogen, alkenyl, alkyl, and cycloalkyl;

$R_f$ ,  $R_{ga}$  and  $R_h$ , at each occurrence, are independently selected from the group consisting of hydrogen, alkyl, alkenyl, aryl, arylalkyl, cycloalkyl, cycloalkylalkyl, cycloalkenyl, cycloalkenylalkyl, heterocycle, heterocyclealkyl, heteroaryl, and heteroarylalkyl, [;] wherein each  $R_f$ ,  $R_{ga}$  and  $R_h$  is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, cyano, halo, oxo, nitro, aryl, arylalkyl, cycloalkyl, cycloalkenyl, heterocycle, heteroaryl, heteroarylalkyl,  $-OH$ ,  $-O(alkyl)$ ,  $-NH_2$ ,  $-N(H)(alkyl)$ ,  $-N(alkyl)_2$ ,  $-S(alkyl)$ ,  $-S(O)(alkyl)$ ,  $-SO_2alkyl$ ,  $-alkyl-OH$ ,  $-alkyl-O-alkyl$ ,  $-alkylNH_2$ ,  $-alkylN(H)(alkyl)$ ,  $-alkylN(alkyl)_2$ ,  $-alkylS(alkyl)$ ,  $-alkylS(O)(alkyl)$ ,  $-alkylSO_2alkyl$ ,  $-N(H)C(O)NH_2$ ,  $-C(O)OH$ ,  $-C(O)O(alkyl)$ ,  $-C(O)alkyl$ ,  $-C(O)NH_2$ ,  $-C(O)NH_2$ ,  $-C(O)N(H)(alkyl)$ , and  $-C(O)N(alkyl)_2$ ;

alternatively,  $R_f$  and  $R_{ga}$  together with the carbon atom to which they are attached, form a three- to seven-membered ring selected from the group consisting of cycloalkyl, cycloalkenyl, and heterocycle;

alternatively,  $R_f$  and  $R_{ha}$  together with the nitrogen atom to which they are attached, form a three- to seven-membered ring selected from the group consisting of heterocycle and heteroaryl, [;] wherein each of the heterocycle and heteroaryl is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, cyano, halo, oxo, nitro, aryl, arylalkyl, cycloalkyl, cycloalkenyl, heterocycle, heteroaryl, heteroarylalkyl,  $-OH$ ,  $-O(alkyl)$ ,  $-NH_2$ ,  $-N(H)(alkyl)$ ,  $-N(alkyl)_2$ ,  $-S(alkyl)$ ,  $-S(alkyl)$ ,  $-S(O)(alkyl)$ ,  $-alkyl-OH$ ,  $-alkyl-O-alkyl$ ,  $-alkylNH_2$ ,  $-alkylN(H)(alkyl)$ ,  $-alkylS(alkyl)$ ,  $-alkylS(O)(alkyl)$ ,  $-alkylSO_2alkyl$ ,  $-alkylN(alkyl)_2$ ,  $-N(H)C(O)NH_2$ ,  $-C(O)OH$ ,  $-C(O)O(alkyl)$ ,  $-C(O)alkyl$ ,  $-C(O)NH_2$ ,  $-C(O)NH_2$ ,  $-C(O)N(H)(alkyl)$ , and  $-C(O)N(alkyl)_2$ ;

$R_k$  is selected from the group consisting of hydrogen, alkenyl, alkyl, aryl, arylalkyl, cyanoalkyl, cycloalkenyl, cycloalkenylalkyl, cycloalkyl, cycloalkylalkyl, formylalkyl, haloalkyl, heteroaryl, heteroarylalkyl, heterocycle, heterocyclealkyl, nitroalkyl,  $R_aR_bNalkyl$ -,  $R_aOalkyl$ -,  $R_aR_bNC(O)$ -,  $R_aR_bNC(O)alkyl$ ,  $R_aS$ -,  $R_aS(O)$ -,  $R_aSO_2$ -,  $R_aSalkyl$ -,  $R_a(O)Salkyl$ -,  $R_aSO_2alkyl$ -,  $R_aOC(O)$ -,  $R_aOC(O)alkyl$ -,  $R_aC(O)$ -, and  $R_aC(O)alkyl$ -, wherein each  $R_k$  is substituted with 0, 1, 2, or 3 substituents

independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(\text{alkyl})(\text{OR}_c)$ ,  $-(\text{alkyl})(\text{NR}_c\text{R}_d)$ ,  $-\text{SR}_c$ ,  $-\text{S}(\text{O})\text{R}_c$ ,  $-\text{S}(\text{O})_2\text{R}_c$ ,  $-\text{OR}_c$ ,  $-\text{N}(\text{R}_c)(\text{R}_d)$ ,  $-\text{C}(\text{O})\text{R}_c$ ,  $-\text{C}(\text{O})\text{OR}_c$ , and  $-\text{C}(\text{O})\text{NR}_c\text{R}_d$ ; and

$m$  is 0, 1, 2, 3, or 4;

~~with the proviso that when  $\text{R}^4$  is hydroxy or  $\text{R}_c\text{S}$ , and  $\text{R}^5$  is hydrogen, unsubstituted alkyl, halo or  $-\text{OR}_b$ , and  $\text{R}^6$  is hydrogen, alkyl, alkenyl, alkynyl, halo, cyano, nitro, aryl, heteroaryl, heterocyclealkyl,  $\text{SR}_b$ ,  $-\text{S}(\text{O})\text{R}_b$ ,  $-\text{S}(\text{O})_2\text{R}_b$ ,  $-\text{OR}_b$ ,  $-\text{N}(\text{R}_b)(\text{R}_b)$ ,  $-\text{C}(\text{O})\text{R}_b$ ,  $-\text{C}(\text{O})\text{OR}_b$ , and  $-\text{C}(\text{O})\text{NR}_b\text{R}_b$ , then  $\text{R}^1$  is not hydrogen, alkenyl, alkyl, alkynyl, aryl, arylalkenyl, arylalkyl, cycloalkyl, (cycloalkyl)alkenyl, (cycloalkyl)alkyl, heteroaryl, heteroarylalkenyl, heteroarylalkyl, heterocyclealkenyl or heterocyclealkyl.~~

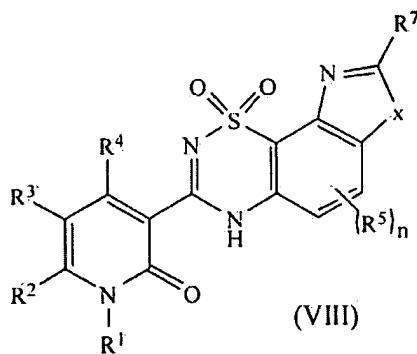
34. (currently amended) The compound, salt, stereoisomer, or tautomer of claim 33, wherein  $\text{R}^4$  is hydroxy.

35. (currently amended) The compound, salt, stereoisomer, or tautomer of claim 34, wherein  $\text{R}^1$  is selected from the group consisting of hydrogen, alkenyl, alkoxyalkyl, alkoxycarbonylalkyl, alkyl, alkynyl, arylalkenyl, arylalkyl, carboxyalkyl, cyanoalkyl, cycloalkenyl, cycloalkenylalkyl, cycloalkyl, cycloalkylalkenyl, cycloalkylalkyl, formylalkyl, haloalkyl, heteroarylalkenyl, heteroarylalkyl, heterocycle, heterocyclealkenyl, heterocyclealkyl, hydroxyalkyl,  $\text{R}_a\text{R}_b\text{N}-$ ,  $\text{R}_a\text{R}_b\text{Nalkyl}-$ ,  $\text{R}_a\text{R}_b\text{NC}(\text{O})\text{alkyl}-$ ,  $\text{R}_f\text{R}_g\text{C}=\text{N}-$ , and  $\text{R}_k\text{O}-$ .

36-51. (canceled)

52. (currently amended) [[The]] A compound or a pharmaceutically acceptable salt form, stereoisomer, or tautomer thereof, wherein:

the compound corresponds in structure to ~~of claim 1~~ of formula (VIII);



~~or a pharmaceutically acceptable salt form, stereoisomer or tautomer thereof, wherein:~~

X is NH, N(alkyl), O, or S; [[:]]

R<sup>1</sup> is selected from the group consisting of hydrogen, alkenyl, alkoxyalkyl, alkoxycarbonylalkyl, alkyl, alkylcarbonylalkyl, alkylsulfanylalkyl, alkylsulfinylalkyl, alkylsulfonylalkyl, alkynyl, aryl, arylalkenyl, arylalkyl, arylsulfanylalkyl, arylsulfonylalkyl, carboxyalkyl, cyanoalkyl, cycloalkenyl, cycloalkenylalkyl, cycloalkyl, (cycloalkyl)alkenyl, (cycloalkyl)alkyl, formylalkyl, haloalkoxyalkyl, haloalkyl, heteroaryl, heteroarylalkenyl, heteroarylalkyl, heteroarylsulfonylalkyl, heterocycle, heterocyclealkenyl, heterocyclealkyl, hydroxyalkyl, nitroalkyl, R<sub>a</sub>R<sub>b</sub>N-, R<sub>a</sub>R<sub>b</sub>Nalkyl-, R<sub>a</sub>R<sub>b</sub>NC(O)alkyl-, R<sub>a</sub>R<sub>b</sub>NC(O)Oalkyl-, R<sub>a</sub>R<sub>b</sub>NC(O)NR<sub>c</sub>alkyl-, R<sub>f</sub>R<sub>g</sub>C=N-, and R<sub>k</sub>O-, wherein R<sup>1</sup> is substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(OR<sub>c</sub>), -(alkyl)(NR<sub>c</sub>R<sub>c</sub>), -SR<sub>c</sub>, -S(O)R<sub>c</sub>, -S(O)<sub>2</sub>R<sub>c</sub>, -OR<sub>c</sub>, -N(R<sub>c</sub>)(R<sub>c</sub>), -C(O)R<sub>c</sub>, -C(O)OR<sub>c</sub>, and -C(O)NR<sub>c</sub>R<sub>c</sub>;

R<sup>2</sup> and R<sup>3</sup> are independently selected from the group consisting of hydrogen, alkenyl, alkynyl, alkoxyalkyl, alkoxycarbonyl, alkyl, aryl, arylalkyl, heteroaryl, heterocycle, heteroarylalkyl, cyano, halo, -N(R<sub>a</sub>)(R<sub>b</sub>), R<sub>a</sub>R<sub>b</sub>NC(O)-, -SR<sub>a</sub>, -S(O)R<sub>a</sub>, -S(O)<sub>2</sub>R<sub>a</sub>, and -R<sub>a</sub>C(O)- [[:]] wherein R<sup>2</sup> and R<sup>3</sup> are independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of R<sub>a</sub>, alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, -(alkyl)(OR<sub>k</sub>), -(alkyl)(NR<sub>a</sub>R<sub>b</sub>), -SR<sub>a</sub>, -S(O)R<sub>a</sub>, -S(O)<sub>2</sub>R<sub>a</sub>, -OR<sub>k</sub>, -N(R<sub>a</sub>)(R<sub>b</sub>), -C(O)R<sub>a</sub>, -C(O)OR<sub>a</sub>, and -C(O)NR<sub>a</sub>R<sub>b</sub>;

alternatively, R<sup>2</sup> and R<sup>3</sup>, together with the carbon atoms to which they are attached, form a five- or six-membered ring selected from the group consisting of aryl, cycloalkyl, heteroaryl, and heterocycle, wherein said aryl, cycloalkyl, heteroaryl, and heterocycle is optionally substituted with (R<sup>6</sup>)<sub>m</sub>;

R<sup>4</sup> is selected from the group consisting of alkoxy, arylalkoxy, aryloxy, halo, hydroxy, R<sub>a</sub>R<sub>b</sub>N-, N<sub>3</sub>-, and R<sub>c</sub>S-, wherein R<sup>4</sup> is independently substituted with 0, 1, or 2 substituents independently selected from the group consisting of halo, nitro, cyano, -OH, -NH<sub>2</sub>, and -COOH;

R<sup>5</sup> is independently selected at each occurrence from the group consisting of alkenyl, alkoxy, alkyl, alkynyl, aryl, arylalkyl, arylcarbonyl, aryloxy, azidoalkyl, formyl, halo, haloalkyl, halocarbonyl, heteroaryl, heteroarylalkyl, heterocycle, heterocyclealkyl, hydroxyalkyl, cycloalkyl, cyano, cyanoalkyl, nitro, R<sub>a</sub>R<sub>b</sub>N-, R<sub>a</sub>C(O)-, R<sub>a</sub>S-, R<sub>a</sub>(O)S-, R<sub>a</sub>(O)<sub>2</sub>S-, R<sub>a</sub>R<sub>b</sub>Nalkyl-, R<sub>a</sub>(O)SN(R<sub>f</sub>)-, R<sub>a</sub>SO<sub>2</sub>N(R<sub>f</sub>)-, R<sub>a</sub>(O)SN(R<sub>f</sub>)alkyl-, R<sub>a</sub>SO<sub>2</sub>N(R<sub>f</sub>)alkyl-, R<sub>a</sub>R<sub>b</sub>NSO<sub>2</sub>N(R<sub>f</sub>)-, R<sub>a</sub>R<sub>b</sub>NSO<sub>2</sub>N(R<sub>f</sub>)alkyl-, R<sub>a</sub>R<sub>b</sub>NC(O)-, R<sub>k</sub>OC(O)-, R<sub>k</sub>OC(O)alkyl-, R<sub>k</sub>Oalkyl-, R<sub>a</sub>R<sub>b</sub>NSO<sub>2</sub>-, R<sub>a</sub>R<sub>b</sub>NSO<sub>2</sub>alkyl-, (R<sub>b</sub>O)(R<sub>a</sub>)P(O)O-, and -OR<sub>k</sub>, wherein each R<sup>5</sup> is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle,

arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(\text{alkyl})(\text{OR}_c)$ ,  $-(\text{alkyl})(\text{NR}_c\text{R}_d)$ ,  $-\text{SR}_c$ ,  $-\text{S}(\text{O})\text{R}_c$ ,  $-\text{S}(\text{O})_2\text{R}_c$ ,  $-\text{OR}_c$ ,  $-\text{N}(\text{R}_c)(\text{R}_d)$ ,  $-\text{C}(\text{O})\text{R}_c$ ,  $-\text{C}(\text{O})\text{OR}_{c1}$  and  $-\text{C}(\text{O})\text{NR}_c\text{R}_d$ ;

$\text{R}^6$  is independently selected at each occurrence from the group consisting of alkyl, alkenyl, alkynyl, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, heterocyclealkyl,  $-(\text{alkyl})(\text{OR}_k)$ ,  $-(\text{alkyl})(\text{NR}_a\text{R}_b)$ ,  $-\text{SR}_a$ ,  $-\text{S}(\text{O})\text{R}_a$ ,  $-\text{S}(\text{O})_2\text{R}_a$ ,  $-\text{OR}_k$ ,  $-\text{N}(\text{R}_a)(\text{R}_b)$ ,  $-\text{C}(\text{O})\text{R}_a$ ,  $-\text{C}(\text{O})\text{OR}_{a1}$  and  $-\text{C}(\text{O})\text{NR}_a\text{R}_{b1}$  [;] wherein each  $\text{R}^6$  is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, haloalkyl, cyano, nitro,  $-\text{OR}_a$ ,  $-\text{NR}_a\text{R}_b$ ,  $-\text{SR}_a$ ,  $-\text{SOR}_a$ ,  $-\text{SO}_2\text{R}_a$ ,  $-\text{C}(\text{O})\text{OR}_a$ ,  $-\text{C}(\text{O})\text{NR}_a\text{R}_{b1}$  and  $-\text{NC}(\text{O})\text{R}_a$ ;

$\text{R}^7$  is independently selected at each occurrence from the group consisting of alkenyl, alkoxy, alkyl, alkynyl, aryl, arylalkyl, arylcarbonyl, aryloxy, azidoalkyl, formyl, halo, haloalkyl, halocarbonyl, heteroaryl, heteroarylalkyl, heterocycle, heterocyclealkyl, hydroxyalkyl, cycloalkyl, cyano, cyanoalkyl, nitro,  $\text{R}_a\text{R}_b\text{N}-$ ,  $\text{R}_a\text{C}(\text{O})-$ ,  $\text{R}_a\text{S}-$ ,  $\text{R}_a(\text{O})\text{S}-$ ,  $\text{R}_a(\text{O})_2\text{S}-$ ,  $\text{R}_a\text{R}_b\text{Nalkyl}-$ ,  $\text{R}_a(\text{O})\text{SN}(\text{R}_f)-$ ,  $\text{R}_a\text{SO}_2\text{N}(\text{R}_f)-$ ,  $\text{R}_a(\text{O})\text{SN}(\text{R}_f)\text{alkyl}-$ ,  $\text{R}_a\text{SO}_2\text{N}(\text{R}_f)\text{alkyl}-$ ,  $\text{R}_a\text{R}_b\text{NSO}_2\text{N}(\text{R}_f)-$ ,  $\text{R}_a\text{R}_b\text{NSO}_2\text{N}(\text{R}_f)\text{alkyl}-$ ,  $\text{R}_a\text{R}_b\text{NC}(\text{O})-$ ,  $\text{R}_k\text{OC}(\text{O})-$ ,  $\text{R}_k\text{OC}(\text{O})\text{alkyl}-$ ,  $\text{R}_k\text{Oalkyl}-$ ,  $\text{R}_a\text{R}_b\text{NSO}_2-$ ,  $\text{R}_a\text{R}_b\text{NSO}_2\text{alkyl}-$ ,  $(\text{R}_k\text{O})(\text{R}_a)\text{P}(\text{O})\text{O}-$  and  $-\text{OR}_k$ , wherein each  $\text{R}^7$  is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(\text{alkyl})(\text{OR}_c)$ ,  $-(\text{alkyl})(\text{NR}_c\text{R}_d)$ ,  $-\text{SR}_c$ ,  $-\text{S}(\text{O})\text{R}_c$ ,  $-\text{S}(\text{O})_2\text{R}_c$ ,  $-\text{OR}_c$ ,  $-\text{N}(\text{R}_c)(\text{R}_d)$ ,  $-\text{C}(\text{O})\text{R}_c$ ,  $-\text{C}(\text{O})\text{OR}_{c1}$  and  $-\text{C}(\text{O})\text{NR}_c\text{R}_d$ ;

$\text{R}_a$  and  $\text{R}_b$ , at each occurrence, are independently selected from the group consisting of hydrogen, alkenyl, alkyl, alkylsulfanylalkyl, aryl, arylalkenyl, arylalkyl, cyanoalkyl, cycloalkenyl, cycloalkenylalkyl, cycloalkyl, cycloalkylalkyl, cycloalkylalkenyl, formylalkyl, haloalkyl, heteroaryl, heteroarylalkenyl, heteroarylalkyl, heterocycle, heterocyclealkenyl, heterocyclealkyl, hydroxyalkylcarbonyl, nitroalkyl,  $\text{R}_c\text{R}_d\text{N}-$ ,  ~~$\text{R}_k\text{O}-\text{R}_k\text{Oalkyl}-$~~ ,  $\text{R}_c\text{R}_d\text{Nalkyl}-$ ,  $\text{R}_c\text{R}_d\text{NC}(\text{O})\text{alkyl}-$ ,  $\text{R}_c\text{SO}_2-$ ,  $\text{R}_c\text{SO}_2\text{alkyl}-$ ,  $\text{R}_c\text{C}(\text{O})-$ ,  $\text{R}_c\text{C}(\text{O})\text{alkyl}-$ ,  $\text{R}_c\text{OC}(\text{O})-$ ,  $\text{R}_c\text{OC}(\text{O})\text{alkyl}-$ ,  $\text{R}_c\text{R}_d\text{NalkylC}(\text{O})-$ ,  $\text{R}_c\text{R}_d\text{NC}(\text{O})-$ ,  $\text{R}_c\text{R}_d\text{NC}(\text{O})\text{Oalkyl}-$ , and  $\text{R}_c\text{R}_d\text{NC}(\text{O})\text{N}(\text{R}_e)\text{alkyl}-$ , wherein  $\text{R}_a$  and  $\text{R}_b$  are substituted with 0, 1, or 2 substituents selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(\text{alkyl})(\text{OR}_c)$ ,  $-(\text{alkyl})(\text{NR}_c\text{R}_d)$ ,  $-\text{SR}_c$ ,  $-\text{S}(\text{O})\text{R}_c$ ,  $-\text{S}(\text{O})_2\text{R}_c$ ,  $-\text{OR}_c$ ,  $-\text{N}(\text{R}_c)(\text{R}_d)$ ,  $-\text{C}(\text{O})\text{R}_c$ ,  $-\text{C}(\text{O})\text{OR}_{c1}$  and  $-\text{C}(\text{O})\text{NR}_c\text{R}_d$ ;

alternatively,  $\text{R}_a$  and  $\text{R}_b$ , together with the nitrogen atom to which they are attached, form a three- to six-membered ring selected from the group consisting of heteroaryl and heterocycle, wherein the heteroaryl and heterocycle are independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl,



haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(\text{alkyl})(\text{OR}_c)$ ,  $-(\text{alkyl})(\text{NR}_c\text{R}_d)$ ,  $-\text{alkylSO}_2\text{NR}_c\text{R}_d$ ,  $-\text{alkylC}(\text{O})\text{NR}_c\text{R}_d$ ,  $-\text{SR}_c$ ,  $-\text{S}(\text{O})\text{R}_c$ ,  $-\text{S}(\text{O})_2\text{R}_c$ ,  $-\text{OR}_c$ ,  $-\text{N}(\text{R}_c)(\text{R}_d)$ ,  $-\text{C}(\text{O})\text{R}_c$ ,  $-\text{C}(\text{O})\text{OR}_c$  and  $-\text{C}(\text{O})\text{NR}_c\text{R}_d$ ;

$\text{R}_c$  and  $\text{R}_d$ , at each occurrence, are independently selected from the group consisting of hydrogen,  $-\text{NR}_f\text{R}_h$ ,  $-\text{OR}_f$ ,  $-\text{CO}(\text{R}_f)$ ,  $-\text{SR}_f$ ,  $-\text{SOR}_f$ ,  $-\text{SO}_2\text{R}_f$ ,  $-\text{C}(\text{O})\text{NR}_f\text{R}_h$ ,  $-\text{SO}_2\text{NR}_f\text{R}_h$ ,  $-\text{C}(\text{O})\text{OR}_f$ , alkenyl, alkyl, alkynyl, cycloalkyl, cycloalkylalkyl, cycloalkenyl, cycloalkenylalkyl, aryl, arylalkyl, haloalkyl, heteroaryl, heteroarylalkyl, heterocycle, and heterocyclealkyl; wherein each  $\text{R}_c$  and  $\text{R}_d$  is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(\text{alkyl})(\text{OR}_f)$ ,  $-(\text{alkyl})(\text{NR}_f\text{R}_h)$ ,  $-\text{SR}_f$ ,  $-\text{S}(\text{O})\text{R}_f$ ,  $-\text{S}(\text{O})_2\text{R}_f$ ,  $-\text{OR}_f$ ,  $-\text{N}(\text{R}_f)(\text{R}_h)$ ,  $-\text{C}(\text{O})\text{R}_f$ ,  $-\text{C}(\text{O})\text{OR}_f$ ,  $-\text{C}(\text{O})\text{NR}_f\text{R}_h$ ,  $-\text{C}(\text{O})\text{N}(\text{H})\text{NR}_f\text{R}_h$ ,  $-\text{N}(\text{R}_c)\text{C}(\text{O})\text{OR}_f$ ,  $-\text{N}(\text{R}_c)\text{SO}_2\text{NR}_f\text{R}_h$ ,  $-\text{N}(\text{R}_c)\text{C}(\text{O})\text{NR}_f\text{R}_h$ ,  $-\text{alkylN}(\text{R}_c)\text{C}(\text{O})\text{OR}_f$ ,  $-\text{alkylN}(\text{R}_c)\text{SO}_2\text{NR}_f\text{R}_h$ , and  $-\text{alkylN}(\text{R}_c)\text{C}(\text{O})\text{NR}_f\text{R}_h$ ;

alternatively,  $\text{R}_c$  and  $\text{R}_d$ , together with the nitrogen atom to which they are attached, form a three- to six-membered ring selected from the group consisting of heteroaryl and heterocycle, wherein the heteroaryl and heterocycle are independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(\text{alkyl})(\text{OR}_f)$ ,  $-(\text{alkyl})(\text{NR}_f\text{R}_h)$ ,  $-\text{SR}_f$ ,  $-\text{S}(\text{O})\text{R}_f$ ,  $-\text{S}(\text{O})_2\text{R}_f$ ,  $-\text{OR}_f$ ,  $-\text{N}(\text{R}_f)(\text{R}_h)$ ,  $-\text{C}(\text{O})\text{R}_f$ ,  $-\text{C}(\text{O})\text{OR}_f$  and  $-\text{C}(\text{O})\text{NR}_f\text{R}_h$ ;

$\text{R}_c$  is selected from the group consisting of hydrogen, alkenyl, alkyl, and cycloalkyl;

$\text{R}_f$ ,  $\text{R}_{f2}$  and  $\text{R}_h$ , at each occurrence, are independently selected from the group consisting of hydrogen, alkyl, alkenyl, aryl, arylalkyl, cycloalkyl, cycloalkylalkyl, cycloalkenyl, cycloalkenylalkyl, heterocycle, heterocyclealkyl, heteroaryl, and heteroarylalkyl; wherein each  $\text{R}_f$ ,  $\text{R}_{f2}$  and  $\text{R}_h$  is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, cyano, halo, oxo, nitro, aryl, arylalkyl, cycloalkyl, cycloalkenyl, heterocycle, heteroaryl, heteroarylalkyl,  $-\text{OH}$ ,  $-\text{O}(\text{alkyl})$ ,  $-\text{NH}_2$ ,  $-\text{N}(\text{H})(\text{alkyl})$ ,  $-\text{N}(\text{alkyl})_2$ ,  $-\text{S}(\text{alkyl})$ ,  $-\text{S}(\text{O})(\text{alkyl})$ ,  $-\text{SO}_2\text{alkyl}$ ,  $-\text{alkyl}-\text{OH}$ ,  $-\text{alkyl}-\text{O}-\text{alkyl}$ ,  $-\text{alkylNH}_2$ ,  $-\text{alkylN}(\text{H})(\text{alkyl})$ ,  $-\text{alkylN}(\text{alkyl})_2$ ,  $-\text{alkylS}(\text{alkyl})$ ,  $-\text{alkylS}(\text{O})(\text{alkyl})$ ,  $-\text{alkylSO}_2\text{alkyl}$ ,  $-\text{N}(\text{H})\text{C}(\text{O})\text{NH}_2$ ,  $-\text{C}(\text{O})\text{OH}$ ,  $-\text{C}(\text{O})\text{O}(\text{alkyl})$ ,  $-\text{C}(\text{O})\text{alkyl}$ ,  $-\text{C}(\text{O})\text{NH}_2$ ,  $-\text{C}(\text{O})\text{NH}_2$ ,  $-\text{C}(\text{O})\text{N}(\text{H})(\text{alkyl})$ , and  $-\text{C}(\text{O})\text{N}(\text{alkyl})_2$ ;

alternatively,  $\text{R}_f$  and  $\text{R}_{f2}$  together with the carbon atom to which they are attached, form a three- to seven-membered ring selected from the group consisting of cycloalkyl, cycloalkenyl, and heterocycle;

alternatively,  $\text{R}_f$  and  $\text{R}_{h2}$  together with the nitrogen atom to which they are attached, form a three- to seven-membered ring selected from the group consisting of heterocycle and heteroaryl, [;] wherein each of the heterocycle and heteroaryl is independently substituted with 0, 1, 2, or 3 substituents

independently selected from the group consisting of alkyl, alkenyl, alkynyl, cyano, halo, oxo, nitro, aryl, arylalkyl, cycloalkyl, cycloalkenyl, heterocycle, heteroaryl, heteroarylalkyl, -OH, -O(alkyl), -NH<sub>2</sub>, -N(H)(alkyl), -N(alkyl)<sub>2</sub>, -S(alkyl), -S(alkyl), -S(O)(alkyl), -alkyl-OH, -alkyl-O-alkyl, -alkylNH<sub>2</sub>, -alkylN(H)(alkyl), -alkylS(alkyl), -alkylS(O)(alkyl), -alkylSO<sub>2</sub>alkyl, -alkylN(alkyl)<sub>2</sub>, -N(H)C(O)NH<sub>2</sub>, -C(O)OH, -C(O)O(alkyl), -C(O)alkyl, -C(O)NH<sub>2</sub>, -C(O)NH<sub>2</sub>, -C(O)N(H)(alkyl), and -C(O)N(alkyl)<sub>2</sub>;

R<sub>k</sub> is selected from the group consisting of hydrogen, alkenyl, alkyl, aryl, arylalkyl, cyanoalkyl, cycloalkenyl, cycloalkenylalkyl, cycloalkyl, cycloalkylalkyl, formylalkyl, haloalkyl, heteroaryl, heteroarylalkyl, heterocycle, heterocyclealkyl, nitroalkyl, R<sub>a</sub>R<sub>b</sub>Nalkyl-, R<sub>a</sub>Oalkyl-, R<sub>a</sub>R<sub>b</sub>NC(O)-, R<sub>a</sub>R<sub>b</sub>NC(O)alkyl, R<sub>a</sub>S-, R<sub>a</sub>S(O)-, R<sub>a</sub>SO<sub>2</sub>-, R<sub>a</sub>Salkyl-, R<sub>a</sub>(O)Salkyl-, R<sub>a</sub>SO<sub>2</sub>alkyl-, R<sub>a</sub>OC(O)-, R<sub>a</sub>OC(O)alkyl-, R<sub>a</sub>C(O)-, and R<sub>a</sub>C(O)alkyl-, wherein each R<sub>k</sub> is substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(OR<sub>c</sub>), -(alkyl)(NR<sub>c</sub>R<sub>d</sub>), -SR<sub>c</sub>, -S(O)R<sub>c</sub>, -S(O)<sub>2</sub>R<sub>c</sub>, -OR<sub>c</sub>, -N(R<sub>c</sub>)(R<sub>d</sub>), -C(O)R<sub>c</sub>, -C(O)OR<sub>c</sub>, and -C(O)NR<sub>c</sub>R<sub>d</sub>;

m is 0, 1, 2, 3, or 4; and

n is 0, 1, or 2.

53. **(currently amended)** The compound, salt, stereoisomer, or tautomer of claim 52, wherein R<sup>2</sup> and R<sup>3</sup>, together with the carbon atoms to which they are attached, form a five- or six-membered ring selected from the group consisting of aryl, cycloalkyl, heteroaryl and heterocycle, wherein said aryl, cycloalkyl, heteroaryl, and heterocycle is optionally substituted with (R<sup>6</sup>)<sub>m</sub>.

54. **(currently amended)** The compound, salt, stereoisomer, or tautomer of claim 53, wherein R<sup>2</sup> and R<sup>3</sup>, together with the carbon atoms to which they are attached, form a five- or six-membered ring selected from the group consisting of phenyl, pyridyl, pyridazinyl, pyrimidinyl, pyrazolyl, cyclopentyl, cyclohexyl, and thienyl.

55. **(currently amended)** The compound, salt, stereoisomer, or tautomer of claim 54, wherein R<sup>4</sup> is hydroxy.

56. **(currently amended)** The compound, salt, stereoisomer, or tautomer of claim 55, wherein the compound is or a pharmaceutically acceptable salt form, stereoisomer or tautomer thereof selected from the group consisting of:

3-(1,1-dioxido-4H-[1,3]oxazolo[5,4-h][1,2,4]benzothiadiazin-3-yl)-4-hydroxy-1-(isobutylamino)quinolin-2(1H)-one;

3-[8-(chloromethyl)-1,1-dioxido-4H-[1,3]oxazolo[5,4-h][1,2,4]benzothiadiazin-3-yl]-4-hydroxy-1-(isobutylamino)quinolin-2(1H)-one;

3-{3-[4-hydroxy-1-(isobutylamino)-2-oxo-1,2-dihydroquinolin-3-yl]-1,1-dioxido-4H-[1,3]oxazolo[5,4-h][1,2,4]benzothiadiazin-8-yl}propanoic acid;

3-(8-{{(2-aminoethyl)amino}methyl}-1,1-dioxido-4H-[1,3]oxazolo[5,4-h][1,2,4]benzothiadiazin-3-yl)-4-hydroxy-1-(isobutylamino)quinolin-2(1H)-one;

methyl {3-[4-hydroxy-1-(isobutylamino)-2-oxo-1,2-dihydroquinolin-3-yl]-1,1-dioxido-4H-[1,3]oxazolo[5,4-h][1,2,4]benzothiadiazin-8-yl} acetate;

4-hydroxy-3-(8-{{(3R)-3-hydroxypyrrolidin-1-yl}methyl}-1,1-dioxido-4H-[1,3]oxazolo[5,4-h][1,2,4]benzothiadiazin-3-yl)-1-(isobutylamino)quinolin-2(1H)-one;

3-[1,1-dioxido-8-(pyridinium-1-ylmethyl)-4H-[1,3]oxazolo[5,4-h][1,2,4]benzothiadiazin-3-yl]-1-(isobutylamino)-2-oxo-1,2-dihydroquinolin-4-olate;

3-[1,1-dioxido-8-(pyrrolidin-1-ylmethyl)-4H-[1,3]oxazolo[5,4-h][1,2,4]benzothiadiazin-3-yl]-4-hydroxy-1-(isobutylamino)quinolin-2(1H)-one;

3-[8-(3-aminophenyl)-1,1-dioxido-4H-[1,3]oxazolo[5,4-h][1,2,4]benzothiadiazin-3-yl]-4-hydroxy-1-(isobutylamino)quinolin-2(1H)-one;

3-[8-(aminomethyl)-1,1-dioxido-4H-[1,3]oxazolo[5,4-h][1,2,4]benzothiadiazin-3-yl]-4-hydroxy-1-(isobutylamino)quinolin-2(1H)-one;

4-hydroxy-3-[8-(hydroxymethyl)-1,1-dioxido-4H-[1,3]oxazolo[5,4-h][1,2,4]benzothiadiazin-3-yl]-1-(isobutylamino)quinolin-2(1H)-one;

3-{8-[(butylamino)methyl]-1,1-dioxido-4H-[1,3]oxazolo[5,4-h][1,2,4]benzothiadiazin-3-yl}-4-hydroxy-1-(isobutylamino)quinolin-2(1H)-one;

3-[9-(butylamino)-1,1-dioxido-4H,8H-[1,4]oxazino[2,3-h][1,2,4]benzothiadiazin-3-yl]-4-hydroxy-1-(isobutylamino)quinolin-2(1H)-one;

4-hydroxy-1-(3-methylbutyl)-3-(8-methyl-1,1-dioxido-4H-[1,3]oxazolo[5,4-h][1,2,4]benzothiadiazin-3-yl)-1,8-naphthyridin-2(1H)-one;

3-[1,1-dioxido-8-(trifluoromethyl)-4,7-dihydroimidazo[4,5-h][1,2,4]benzothiadiazin-3-yl]-4-hydroxy-1-(3-methylbutyl)-1,8-naphthyridin-2(1H)-one;

4-hydroxy-3-(8-hydroxy-1,1-dioxido-4,7-dihydroimidazo[4,5-h][1,2,4]benzothiadiazin-3-yl)-1-(3-methylbutyl)-1,8-naphthyridin-2(1H)-one;

4-hydroxy-1-(3-methylbutyl)-3-(8-methyl-1,1-dioxido-4,7-dihydroimidazo[4,5-h][1,2,4]benzothiadiazin-3-yl)-1,8-naphthyridin-2(1H)-one;

3-[1,1-dioxido-8-(pentafluoroethyl)-4,7-dihydroimidazo[4,5-h][1,2,4]benzothiadiazin-3-yl]-4-

hydroxy-1-(3-methylbutyl)-1,8-naphthyridin-2(1H)-one;

3-[8-(chloromethyl)-1,1-dioxido-4,7-dihydroimidazo[4,5-h][1,2,4]benzothiadiazin-3-yl]-4-hydroxy-1-(3-methylbutyl)-1,8-naphthyridin-2(1H)-one;

{3-[4-hydroxy-1-(3-methylbutyl)-2-oxo-1,2-dihydro-1,8-naphthyridin-3-yl]-1,1-dioxido-4,7-dihydroimidazo[4,5-h][1,2,4]benzothiadiazin-8-yl}acetonitrile;

methyl {3-[4-hydroxy-1-(3-methylbutyl)-2-oxo-1,2-dihydro-1,8-naphthyridin-3-yl]-1,1-dioxido-4,7-dihydroimidazo[4,5-h][1,2,4]benzothiadiazin-8-yl}acetate;

3-(9,9-dioxido-6*H*-[1,2,5]thiadiazolo[3,4-*h*][1,2,4]benzothiadiazin-7-yl)-4-hydroxy-1-(3-methylbutyl)-1,8-naphthyridin-2(1*H*)-one;

3-(8-amino-1,1-dioxido-4,7-dihydroimidazo[4,5-*h*][1,2,4]benzothiadiazin-3-yl)-4-hydroxy-1-(3-methylbutyl)-1,8-naphthyridin-2(1H)-one; and

4-hydroxy-3-[8-(hydroxymethyl)-1,1-dioxido-4,9-dihydroimidazo[4,5-*h*][1,2,4]benzothiadiazin-3-yl]-1-(3-methylbutyl)-1,8-naphthyridin-2(1*H*)-one.

57. **(original)** *N*-{3-[1-(cyclobutylamino)-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl]-1,1-dioxido-4*H*-1,2,4-benzothiadiazin-7-yl}methanesulfonamide, or a pharmaceutically acceptable salt, stereoisomer or tautomer thereof.

58. **(original)** *N*-[(3-{1-[(cyclopropylmethyl)amino]-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl}-1,1-dioxido-4*H*-thieno[2,3-*c*][1,2,4]thiadiazin-7-yl)methyl]methanesulfonamide, or a pharmaceutically acceptable salt, stereoisomer or tautomer thereof.

59. **(original)** *N*-(3-{1-[(cyclopropylmethyl)amino]-4-hydroxy-2-oxo-1,2-dihydro-3-quinolinyl}-1,1-dioxido-4*H*-1,2,4-benzothiadiazin-7-yl)methanesulfonamide, or a pharmaceutically acceptable salt, stereoisomer or tautomer thereof.

60. **(original)** *N*-{3-[1-(cyclobutylamino)-4-hydroxy-2-oxo-1,2-dihydro-3-quinolinyl]-1,1-dioxido-4*H*-1,2,4-benzothiadiazin-7-yl}sulfamide, or a pharmaceutically acceptable salt, stereoisomer or tautomer thereof.

61. **(original)** *N*-{3-[1-(cyclobutylamino)-4-hydroxy-2-oxo-1,2-dihydro-3-quinolinyl]-1,1-dioxido-4*H*-1,2,4-benzothiadiazin-7-yl}-*N*'-methylsulfamide, or a pharmaceutically acceptable salt, stereoisomer or tautomer thereof.

62. **(currently amended)** A pharmaceutical composition comprising a therapeutically effective amount of ~~[[a]]~~ one or more compounds, salts, stereoisomers, or tautomers recited in or a combination of compounds of any one of claims ~~[[1]]~~ 25, 30, 33, 52, 57, 58, 59, 60, ~~[[and]]~~ 61, and 90 and a pharmaceutically acceptable carrier.

63. **(currently amended)** The pharmaceutical composition of claim 62, wherein the composition further ~~comprising~~ comprises one or more agents selected from the group consisting of a host immune modulator and a second antiviral agent, ~~or combination thereof.~~

64. **(currently amended)** The pharmaceutical composition of claim 63, wherein each of the one or more host immune modulators is selected from the group consisting of interferon-alpha, pegylated-interferon-alpha, interferon-beta, interferon-gamma, a cytokine, and a vaccine ~~and a vaccine optionally~~ comprising an antigen and an adjuvant.

65. **(currently amended)** The pharmaceutical composition of claim 63, wherein the second antiviral agent inhibits replication of HCV by inhibiting host cellular functions associated with viral replication.

66. **(currently amended)** The pharmaceutical composition of claim 63, wherein the second antiviral agent inhibits the replication of HCV by targeting proteins of the viral genome.

67. **(currently amended)** The pharmaceutical composition of claim 62, wherein the composition further ~~comprising~~ comprises an agent or combination of agents that treat or alleviate symptoms of HCV infection ~~including cirrhosis and inflammation of liver.~~

68. **(currently amended)** The pharmaceutical composition of claim 62, wherein the composition further ~~comprising~~ comprises one or more agents that treat patients for disease caused by hepatitis B (HBV) infection.

69. **(currently amended)** The pharmaceutical composition of claim 68, wherein each of the one or more agents that ~~treats~~ treat patients for disease caused by hepatitis B (HBV) infection is selected from the group consisting of L-deoxythymidine, adefovir, lamivudine, and tenfovir.

70. **(currently amended)** The pharmaceutical composition of claim 62, wherein the composition further ~~comprising~~ comprises one or more agents that treat patients for disease caused by human immunodeficiency virus (HIV) infection.

71. **(currently amended)** The pharmaceutical composition of claim 70, wherein each of the one or more agents that ~~treats~~ treat patients for disease caused by human immunodeficiency virus (HIV) infection is selected from the group consisting of ritonavir, lopinavir, indinavir, nelfinavir, saquinavir, amprenavir, atazanavir, tipranavir, TMC-114, fosamprenavir, zidovudine, lamivudine, didanosine, stavudine, tenofovir, zalcitabine, abacavir, efavirenz, nevirapine, delavirdine, TMC-125, L-870812, S-1360, enfuvirtide (T-20) and T-1249 ~~, or any combination thereof.~~

72. **(withdrawn)** A method of treating or preventing infection caused by an RNA-containing virus comprising administering to a patient in need of such treatment a pharmaceutical composition of any one of claims 62, 63, 64, 65, 66, 67, 68, 69, 70 and 71.

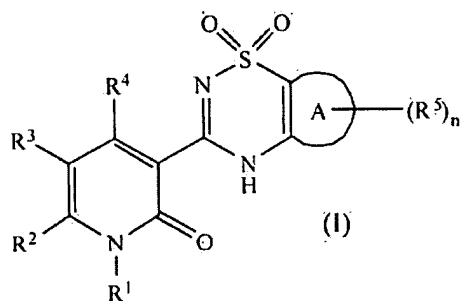
73. **(withdrawn)** A method of inhibiting the replication of an RNA-containing virus comprising contacting said virus with a therapeutically effective amount of a compound or combination of compounds of any one of claims 1, 57, 58, 59, 60 and 61.

74. **(withdrawn)** A method of treating or preventing infection caused by an RNA-containing virus comprising administering to a patient in need of such treatment a therapeutically effective amount of a compound or combination of compounds of any one of claims 1, 57, 58, 59, 60 and 61.

75. **(withdrawn)** The method of claim 72 wherein the RNA-containing virus is hepatitis C virus.

76-84. **(canceled)**

85. **(withdrawn)** A process for the preparation of a compound of formula (I)



or a pharmaceutically acceptable salt form, stereoisomer or tautomer thereof, wherein:

A is a monocyclic or bicyclic ring selected from the group consisting of aryl, cycloalkyl, cycloalkenyl, heteroaryl and heterocycle;

R<sup>1</sup> is selected from the group consisting of hydrogen, alkenyl, alkoxyalkyl, alkoxycarbonylalkyl,

alkyl, alkylcarbonylalkyl, alkylsulfanylalkyl, alkylsulfinylalkyl, alkylsulfonylalkyl, alkynyl, aryl, arylalkenyl, arylalkyl, arylsulfanylalkyl, arylsulfonylalkyl, carboxyalkyl, cyanoalkyl, cycloalkenyl, cycloalkenylalkyl, cycloalkyl, (cycloalkyl)alkenyl, (cycloalkyl)alkyl, formylalkyl, haloalkoxyalkyl, haloalkyl, heteroaryl, heteroarylalkenyl, heteroarylalkyl, heteroarylsulfonylalkyl, heterocycle, heterocyclealkenyl, heterocyclealkyl, hydroxyalkyl, nitroalkyl,  $R_aR_bN-$ ,  $R_aR_bNalkyl-$ ,  $R_aR_bNC(O)alkyl-$ ,  $R_aR_bNC(O)Oalkyl-$ ,  $R_aR_bNC(O)NR_calkyl-$ ,  $R_fR_gC=N-$  and  $R_kO-$ , wherein  $R^1$  is independently substituted with 0, 1, 2 or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(alkyl)(OR_c)$ ,  $-(alkyl)(NR_cR_c)$ ,  $-SR_c$ ,  $-S(O)R_c$ ,  $-S(O)_2R_c$ ,  $-OR_c$ ,  $-N(R_c)(R_c)$ ,  $-C(O)R_c$ ,  $-C(O)OR_c$  and  $-C(O)NR_cR_c$ ;

$R^2$  and  $R^3$  are independently selected from the group consisting of hydrogen, alkenyl, alkynyl, alkoxyalkyl, alkoxycarbonyl, alkyl, aryl, arylalkyl, heteroaryl, heterocycle, heteroarylalkyl, cyano, halo,  $-N(R_a)(R_b)$ ,  $R_aR_bNC(O)-$ ,  $-SR_a$ ,  $-S(O)R_a$ ,  $-S(O)_2R_a$  and  $R_aC(O)-$ ; wherein  $R^2$  and  $R^3$  are independently substituted with 0, 1, 2 or 3 substituents independently selected from the group consisting of  $R_a$ , alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl,  $-(alkyl)(OR_k)$ ,  $-(alkyl)(NR_aR_b)$ ,  $-SR_a$ ,  $-S(O)R_a$ ,  $-S(O)_2R_a$ ,  $-OR_k$ ,  $-N(R_a)(R_b)$ ,  $-C(O)R_a$ ,  $-C(O)OR_a$  and  $-C(O)NR_aR_b$ ;

alternatively,  $R^2$  and  $R^3$ , together with the carbon atoms to which they are attached form a five- or six-membered ring selected from the group consisting of aryl, cycloalkyl, heteroaryl and heterocycle, wherein said aryl, cycloalkyl, heteroaryl and heterocycle is optionally substituted with  $(R^6)_m$ ;

$R^4$  is selected from the group consisting of alkoxy, arylalkoxy, aryloxy, halo, hydroxy,  $R_aR_bN-$ ,  $N_3-$ ,  $R_cS-$ , wherein  $R^4$  is independently substituted with 0, 1 or 2 substituents independently selected from the group consisting of halo, nitro, cyano,  $-OH$ ,  $-NH_2$ , and  $-COOH$ ;

$R^5$  is independently selected at each occurrence from the group consisting of alkenyl, alkoxy, alkyl, alkynyl, aryl, arylalkyl, arylcarbonyl, aryloxy, azidoalkyl, formyl, halo, haloalkyl, halocarbonyl, heteroaryl, heteroarylalkyl, heterocycle, heterocyclealkyl, hydroxyalkyl, cycloalkyl, cyano, cyanoalkyl, nitro,  $R_aR_bN-$ ,  $R_aC(O)-$ ,  $R_aS-$ ,  $R_a(O)S-$ ,  $R_a(O)_2S-$ ,  $R_aR_bNalkyl-$ ,  $R_a(O)SN(R_f)-$ ,  $R_aSO_2N(R_f)-$ ,  $R_a(O)SN(R_f)alkyl-$ ,  $R_aSO_2N(R_f)alkyl-$ ,  $R_aR_bNSO_2N(R_f)-$ ,  $R_aR_bNSO_2N(R_f)alkyl-$ ,  $R_aR_bNC(O)-$ ,  $R_kOC(O)-$ ,  $R_kOC(O)alkyl-$ ,  $R_kOalkyl-$ ,  $R_aR_bNSO_2-$ ,  $R_aR_bNSO_2alkyl-$ ,  $(R_bO)(R_a)P(O)O-$  and  $-OR_k$ , wherein each  $R^5$  is independently substituted with 0, 1, 2 or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(alkyl)(OR_c)$ ,  $-(alkyl)(NR_cR_d)$ ,  $-SR_c$ ,  $-S(O)R_c$ ,  $-S(O)_2R_c$ ,  $-OR_c$ ,  $-N(R_c)(R_d)$ ,  $-C(O)R_c$ ,  $-C(O)OR_c$  and  $-C(O)NR_cR_d$ ;

$R^6$  is independently selected at each occurrence from the group consisting of alkyl, alkenyl,

alkynyl, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, heterocyclealkyl,  $-(\text{alkyl})(\text{OR}_k)$ ,  $-(\text{alkyl})(\text{NR}_a\text{R}_b)$ ,  $-\text{SR}_a$ ,  $-\text{S}(\text{O})\text{R}_a$ ,  $-\text{S}(\text{O})_2\text{R}_a$ ,  $-\text{OR}_k$ ,  $-\text{N}(\text{R}_a)(\text{R}_b)$ ,  $-\text{C}(\text{O})\text{R}_a$ ,  $-\text{C}(\text{O})\text{OR}_a$  and  $-\text{C}(\text{O})\text{NR}_a\text{R}_b$ ; wherein each  $\text{R}^6$  is independently substituted with 0, 1, 2 or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, haloalkyl, cyano, nitro,  $-\text{OR}_a$ ,  $-\text{NR}_a\text{R}_b$ ,  $-\text{SR}_a$ ,  $-\text{SOR}_a$ ,  $-\text{SO}_2\text{R}_a$ ,  $-\text{C}(\text{O})\text{OR}_a$ ,  $-\text{C}(\text{O})\text{NR}_a\text{R}_b$  and  $-\text{NC}(\text{O})\text{R}_a$ ;

$\text{R}_a$  and  $\text{R}_b$ , at each occurrence, are independently selected from the group consisting of hydrogen, alkenyl, alkyl, alkylsulfanylalkyl, aryl, arylalkenyl, arylalkyl, cyanoalkyl, cycloalkenyl, cycloalkenylalkyl, cycloalkyl, cycloalkylalkyl, cycloalkylalkenyl, formylalkyl, haloalkyl, heteroaryl, heteroarylalkenyl, heteroarylalkyl, heterocycle, heterocyclealkenyl, heterocyclealkyl, hydroxyalkylcarbonyl, nitroalkyl,  $\text{R}_c\text{R}_d\text{N}-$ ,  $\text{R}_k\text{O}-$ ,  $\text{R}_k\text{Oalkyl}-$ ,  $\text{R}_c\text{R}_d\text{Nalkyl}-$ ,  $\text{R}_c\text{R}_d\text{NC}(\text{O})\text{alkyl}-$ ,  $\text{R}_c\text{SO}_2-$ ,  $\text{R}_c\text{SO}_2\text{alkyl}-$ ,  $\text{R}_c\text{C}(\text{O})-$ ,  $\text{R}_c\text{C}(\text{O})\text{alkyl}-$ ,  $\text{R}_c\text{OC}(\text{O})-$ ,  $\text{R}_c\text{OC}(\text{O})\text{alkyl}-$ ,  $\text{R}_c\text{R}_d\text{NalkylC}(\text{O})-$ ,  $\text{R}_c\text{R}_d\text{NC}(\text{O})-$ ,  $\text{R}_c\text{R}_d\text{NC}(\text{O})\text{Oalkyl}-$ ,  $\text{R}_c\text{R}_d\text{NC}(\text{O})\text{N}(\text{R}_e)\text{alkyl}-$ , wherein  $\text{R}_a$  and  $\text{R}_b$  are substituted with 0, 1 or 2 substituents selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(\text{alkyl})(\text{OR}_c)$ ,  $-(\text{alkyl})(\text{NR}_c\text{R}_d)$ ,  $-\text{SR}_c$ ,  $-\text{S}(\text{O})\text{R}_c$ ,  $-\text{S}(\text{O})_2\text{R}_c$ ,  $-\text{OR}_c$ ,  $-\text{N}(\text{R}_c)(\text{R}_d)$ ,  $-\text{C}(\text{O})\text{R}_c$ ,  $-\text{C}(\text{O})\text{OR}_c$  and  $-\text{C}(\text{O})\text{NR}_c\text{R}_d$ ;

alternatively,  $\text{R}_a$  and  $\text{R}_b$ , together with the nitrogen atom to which they are attached form a three- to six-membered ring selected from the group consisting of heteroaryl and heterocycle, wherein the heteroaryl and heterocycle are independently substituted with 0, 1, 2 or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(\text{alkyl})(\text{OR}_c)$ ,  $-(\text{alkyl})(\text{NR}_c\text{R}_d)$ ,  $-\text{alkylSO}_2\text{NR}_c\text{R}_d$ ,  $-\text{alkylC}(\text{O})\text{NR}_c\text{R}_d$ ,  $-\text{SR}_c$ ,  $-\text{S}(\text{O})\text{R}_c$ ,  $-\text{S}(\text{O})_2\text{R}_c$ ,  $-\text{OR}_c$ ,  $-\text{N}(\text{R}_c)(\text{R}_d)$ ,  $-\text{C}(\text{O})\text{R}_c$ ,  $-\text{C}(\text{O})\text{OR}_c$  and  $-\text{C}(\text{O})\text{NR}_c\text{R}_d$ ;

$\text{R}_c$  and  $\text{R}_d$ , at each occurrence, are independently selected from the group consisting of hydrogen,  $-\text{NR}_f\text{R}_h$ ,  $-\text{OR}_f$ ,  $-\text{CO}(\text{R}_f)$ ,  $-\text{SR}_f$ ,  $-\text{SOR}_f$ ,  $-\text{SO}_2\text{R}_f$ ,  $-\text{C}(\text{O})\text{NR}_f\text{R}_h$ ,  $-\text{SO}_2\text{NR}_f\text{R}_h$ ,  $-\text{C}(\text{O})\text{OR}_f$ , alkenyl, alkyl, alkynyl, cycloalkyl, cycloalkylalkyl, cycloalkenyl, cycloalkenylalkyl, aryl, arylalkyl, haloalkyl, heteroaryl, heteroarylalkyl, heterocycle and heterocyclealkyl; wherein each  $\text{R}_c$  and  $\text{R}_d$  is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(\text{alkyl})(\text{OR}_f)$ ,  $-(\text{alkyl})(\text{NR}_f\text{R}_h)$ ,  $-\text{SR}_f$ ,  $-\text{S}(\text{O})\text{R}_f$ ,  $-\text{S}(\text{O})_2\text{R}_f$ ,  $-\text{OR}_f$ ,  $-\text{N}(\text{R}_f)(\text{R}_h)$ ,  $-\text{C}(\text{O})\text{R}_f$ ,  $-\text{C}(\text{O})\text{OR}_f$ ,  $-\text{C}(\text{O})\text{NR}_f\text{R}_h$ ,  $-\text{C}(\text{O})\text{N}(\text{H})\text{NR}_f\text{R}_h$ ,  $-\text{N}(\text{R}_c)\text{C}(\text{O})\text{OR}_f$ ,  $-\text{N}(\text{R}_c)\text{SO}_2\text{NR}_f\text{R}_h$ ,  $-\text{N}(\text{R}_c)\text{C}(\text{O})\text{NR}_f\text{R}_h$ ,  $-\text{alkylN}(\text{R}_c)\text{C}(\text{O})\text{OR}_f$ ,  $-\text{alkylN}(\text{R}_c)\text{SO}_2\text{NR}_f\text{R}_h$ , and  $-\text{alkylN}(\text{R}_c)\text{C}(\text{O})\text{NR}_f\text{R}_h$ ;

alternatively,  $\text{R}_c$  and  $\text{R}_d$ , together with the nitrogen atom to which they are attached form a three- to six-membered ring selected from the group consisting of heteroaryl and heterocycle, wherein the



heteroaryl and heterocycle are independently substituted with 0, 1, 2 or 3 substituents

independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(\text{alkyl})(\text{OR}_f)$ ,  $-(\text{alkyl})(\text{NR}_f\text{R}_h)$ ,  $-\text{SR}_f$ ,  $-\text{S}(\text{O})\text{R}_f$ ,  $-\text{S}(\text{O})_2\text{R}_f$ ,  $-\text{OR}_f$ ,  $-\text{N}(\text{R}_f)(\text{R}_h)$ ,  $-\text{C}(\text{O})\text{R}_f$ ,  $-\text{C}(\text{O})\text{OR}_f$  and  $-\text{C}(\text{O})\text{NR}_f\text{R}_h$ ;

$\text{R}_e$  is selected from the group consisting of hydrogen, alkenyl, alkyl and cycloalkyl;

$\text{R}_f$ ,  $\text{R}_g$  and  $\text{R}_h$ , at each occurrence, are independently selected from the group consisting of hydrogen, alkyl, alkenyl, aryl, arylalkyl, cycloalkyl, cycloalkylalkyl, cycloalkenyl, cycloalkenylalkyl, heterocycle, heterocyclealkyl, heteroaryl and heteroarylalkyl; wherein each  $\text{R}_f$ ,  $\text{R}_g$  and  $\text{R}_h$  is independently substituted with 0, 1, 2 or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, cyano, halo, oxo, nitro, aryl, arylalkyl, cycloalkyl, cycloalkenyl, heterocycle, heteroaryl, heteroarylalkyl,  $-\text{OH}$ ,  $-\text{O}(\text{alkyl})$ ,  $-\text{NH}_2$ ,  $-\text{N}(\text{H})(\text{alkyl})$ ,  $-\text{N}(\text{alkyl})_2$ ,  $-\text{S}(\text{alkyl})$ ,  $-\text{S}(\text{O})(\text{alkyl})$ ,  $-\text{SO}_2\text{alkyl}$ ,  $-\text{alkyl}-\text{OH}$ ,  $-\text{alkyl}-\text{O}-\text{alkyl}$ ,  $-\text{alkylNH}_2$ ,  $-\text{alkylN}(\text{H})(\text{alkyl})$ ,  $-\text{alkylN}(\text{alkyl})_2$ ,  $-\text{alkylS}(\text{alkyl})$ ,  $-\text{alkylS}(\text{O})(\text{alkyl})$ ,  $-\text{alkylSO}_2\text{alkyl}$ ,  $-\text{N}(\text{H})\text{C}(\text{O})\text{NH}_2$ ,  $-\text{C}(\text{O})\text{OH}$ ,  $-\text{C}(\text{O})\text{O}(\text{alkyl})$ ,  $-\text{C}(\text{O})\text{alkyl}$ ,  $-\text{C}(\text{O})\text{NH}_2$ ,  $-\text{C}(\text{O})\text{NH}_2$ ,  $-\text{C}(\text{O})\text{N}(\text{H})(\text{alkyl})$ , and  $-\text{C}(\text{O})\text{N}(\text{alkyl})_2$ ;

alternatively,  $\text{R}_f$  and  $\text{R}_g$  together with the carbon atom to which they are attached form a three- to seven-membered ring selected from the group consisting of cycloalkyl, cycloalkenyl and heterocycle;

alternatively,  $\text{R}_f$  and  $\text{R}_h$  together with the nitrogen atom to which they are attached form a three- to seven-membered ring selected from the group consisting of heterocycle and heteroaryl; wherein each of the heterocycle and heteroaryl is independently substituted with 0, 1, 2 or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, cyano, halo, oxo, nitro, aryl, arylalkyl, cycloalkyl, cycloalkenyl, heterocycle, heteroaryl, heteroarylalkyl,  $-\text{OH}$ ,  $-\text{O}(\text{alkyl})$ ,  $-\text{NH}_2$ ,  $-\text{N}(\text{H})(\text{alkyl})$ ,  $-\text{N}(\text{alkyl})_2$ ,  $-\text{S}(\text{alkyl})$ ,  $-\text{S}(\text{alkyl})$ ,  $-\text{S}(\text{O})(\text{alkyl})$ ,  $-\text{alkyl}-\text{OH}$ ,  $-\text{alkyl}-\text{O}-\text{alkyl}$ ,  $-\text{alkylNH}_2$ ,  $-\text{alkylN}(\text{H})(\text{alkyl})$ ,  $-\text{alkylS}(\text{alkyl})$ ,  $-\text{alkylS}(\text{O})(\text{alkyl})$ ,  $-\text{alkylSO}_2\text{alkyl}$ ,  $-\text{alkylN}(\text{alkyl})_2$ ,  $-\text{N}(\text{H})\text{C}(\text{O})\text{NH}_2$ ,  $-\text{C}(\text{O})\text{OH}$ ,  $-\text{C}(\text{O})\text{O}(\text{alkyl})$ ,  $-\text{C}(\text{O})\text{alkyl}$ ,  $-\text{C}(\text{O})\text{NH}_2$ ,  $-\text{C}(\text{O})\text{NH}_2$ ,  $-\text{C}(\text{O})\text{N}(\text{H})(\text{alkyl})$ , and  $-\text{C}(\text{O})\text{N}(\text{alkyl})_2$ ;

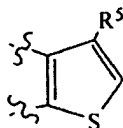
$\text{R}_k$  is selected from the group consisting of hydrogen, alkenyl, alkyl, aryl, arylalkyl, cyanoalkyl, cycloalkenyl, cycloalkenylalkyl, cycloalkyl, cycloalkylalkyl, formylalkyl, haloalkyl, heteroaryl, heteroarylalkyl, heterocycle, heterocyclealkyl, nitroalkyl,  $\text{R}_a\text{R}_b\text{Nalkyl}$ -,  $\text{R}_a\text{Oalkyl}$ -,  $\text{R}_a\text{R}_b\text{NC}(\text{O})$ -,  $\text{R}_a\text{R}_b\text{NC}(\text{O})\text{alkyl}$ -,  $\text{R}_a\text{S}$ -,  $\text{R}_a\text{S}(\text{O})$ -,  $\text{R}_a\text{SO}_2$ -,  $\text{R}_a\text{Salkyl}$ -,  $\text{R}_a(\text{O})\text{Salkyl}$ -,  $\text{R}_a\text{SO}_2\text{alkyl}$ -,  $\text{R}_a\text{OC}(\text{O})$ -,  $\text{R}_a\text{OC}(\text{O})\text{alkyl}$ -,  $\text{R}_a\text{C}(\text{O})$ -,  $\text{R}_a\text{C}(\text{O})\text{alkyl}$ -, wherein each  $\text{R}_k$  is substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(\text{alkyl})(\text{OR}_c)$ ,  $-(\text{alkyl})(\text{NR}_c\text{R}_d)$ ,  $-\text{SR}_c$ ,  $-\text{S}(\text{O})\text{R}_c$ ,  $-\text{S}(\text{O})_2\text{R}_c$ ,  $-\text{OR}_c$ ,  $-\text{N}(\text{R}_c)(\text{R}_d)$ ,  $-\text{C}(\text{O})\text{R}_c$ ,  $-\text{C}(\text{O})\text{OR}_c$  and

$-C(O)NR_cR_d$ ;

m is 0, 1, 2, 3, or 4; and

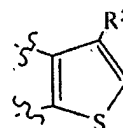
n is 0, 1, 2, 3, or 4;

with the proviso that when A is a monocyclic ring other than



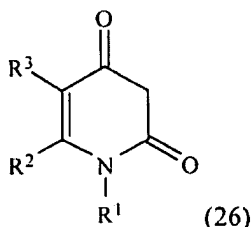
and  $R^4$  is alkoxy, aryloxy, hydroxy or  $R_cS-$ , and  $R^5$  is hydrogen, alkenyl, alkoxy, alkyl, alkynyl, aryl, halo, heteroaryl, heterocyclealkyl, cycloalkyl, cyano, nitro,  $R_aR_bN-$ ,  $R_aC(O)-$ ,  $R_nS-$ ,  $R_a(O)S-$ ,  $R_a(O)_2S-$ ,  $R_aSO_2N(R_f)-$ ,  $R_aR_bNC(O)-$ ,  $R_kOC(O)-$ ,  $R_aR_bNSO_2-$  or  $-OR_k$ , and  $R^6$  is hydrogen, alkyl, alkenyl, alkynyl, halo, cyano, nitro, aryl, heteroaryl, heterocyclealkyl,  $-SR_a$ ,  $-S(O)R_a$ ,  $-S(O)_2R_a$ ,  $-OR_k$ ,  $-N(R_a)(R_b)$ ,  $-C(O)R_a$ ,  $-C(O)OR_a$  and  $-C(O)NR_aR_b$ , then  $R^1$  is not hydrogen, alkenyl, alkyl, alkynyl, aryl, arylalkenyl, arylalkyl, cycloalkyl, (cycloalkyl)alkenyl, (cycloalkyl)alkyl, heteroaryl, heteroarylalkenyl, heteroarylalkyl, heterocyclealkenyl or heterocyclealkyl;

and with the further proviso that when A is

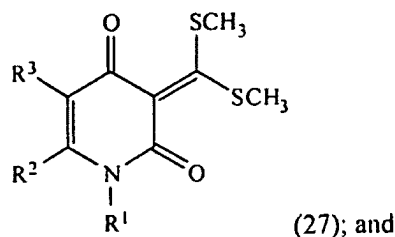


and  $R^4$  is hydroxy or  $R_cS-$ , and  $R^5$  is hydrogen, unsubstituted alkyl, halo or  $-OR_k$ , and  $R^6$  is hydrogen, alkyl, alkenyl, alkynyl, halo, cyano, nitro, aryl, heteroaryl, heterocyclealkyl,  $-SR_a$ ,  $-S(O)R_a$ ,  $-S(O)_2R_a$ ,  $-OR_k$ ,  $-N(R_a)(R_b)$ ,  $-C(O)R_a$ ,  $-C(O)OR_a$  and  $-C(O)NR_aR_b$ , then  $R^1$  is not hydrogen, alkenyl, alkyl, alkynyl, aryl, arylalkenyl, arylalkyl, cycloalkyl, (cycloalkyl)alkenyl, (cycloalkyl)alkyl, heteroaryl, heteroarylalkenyl, heteroarylalkyl, heterocyclealkenyl or heterocyclealkyl; comprising:

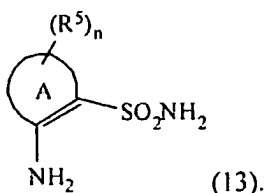
(a) contacting a compound of formula (26)



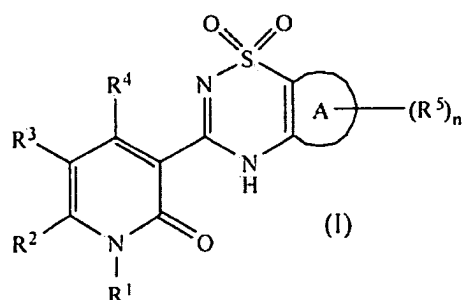
with carbon disulfide and a methylating agent in the presence of a base to provide a compound of formula (27)



(b) contacting the compound of formula (27) with a compound of formula (13)



86. (withdrawn) A process for the preparation of a compound of formula (I),



or a pharmaceutically acceptable salt form, stereoisomer or tautomer thereof, wherein:

A is a monocyclic or bicyclic ring selected from the group consisting of aryl, cycloalkyl, cycloalkenyl, heteroaryl and heterocycle;

R¹ is selected from the group consisting of hydrogen, alkenyl, alkoxyalkyl, alkoxycarbonylalkyl, alkyl, alkylcarbonylalkyl, alkylsulfanylalkyl, alkylsulfinylalkyl, alkylsulfonylalkyl, alkynyl, aryl, arylalkenyl, arylalkyl, arylsulfanylalkyl, arylsulfonylalkyl, carboxyalkyl, cyanoalkyl, cycloalkenyl, cycloalkenylalkyl, cycloalkyl, (cycloalkyl)alkenyl, (cycloalkyl)alkyl, formylalkyl, haloalkoxyalkyl, haloalkyl, heteroaryl, heteroarylalkenyl, heteroarylalkyl, heteroarylsulfonylalkyl, heterocycle, heterocyclealkenyl, heterocyclealkyl, hydroxyalkyl, nitroalkyl, R<sub>a</sub>R<sub>b</sub>N-, R<sub>a</sub>R<sub>b</sub>Nalkyl-, R<sub>a</sub>R<sub>b</sub>NC(O)alkyl-, R<sub>a</sub>R<sub>b</sub>NC(O)Oalkyl-, R<sub>a</sub>R<sub>b</sub>NC(O)NR<sub>c</sub>alkyl-, R<sub>f</sub>R<sub>g</sub>C=N- and R<sub>k</sub>O-, wherein R¹ is independently substituted with 0, 1, 2 or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(OR<sub>c</sub>), -(alkyl)(NR<sub>c</sub>R<sub>c</sub>), -SR<sub>c</sub>, -S(O)R<sub>c</sub>, -S(O)<sub>2</sub>R<sub>c</sub>, -OR<sub>c</sub>, -N(R<sub>c</sub>)(R<sub>c</sub>), -C(O)R<sub>c</sub>, -C(O)OR<sub>c</sub> and -C(O)NR<sub>c</sub>R<sub>c</sub>;

R² and R³ are independently selected from the group consisting of hydrogen, alkenyl, alkynyl,

alkoxyalkyl, alkoxycarbonyl, alkyl, aryl, arylalkyl, heteroaryl, heterocycle, heteroarylalkyl, cyano, halo, -N(R<sub>a</sub>)(R<sub>b</sub>), R<sub>a</sub>R<sub>b</sub>NC(O)-, -SR<sub>a</sub>, -S(O)R<sub>a</sub>, -S(O)<sub>2</sub>R<sub>a</sub> and R<sub>a</sub>C(O)-; wherein R<sup>2</sup> and R<sup>3</sup> are independently substituted with 0, 1, 2 or 3 substituents independently selected from the group consisting of R<sub>a</sub>, alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, -(alkyl)(OR<sub>k</sub>), -(alkyl)(NR<sub>a</sub>R<sub>b</sub>), -SR<sub>a</sub>, -S(O)R<sub>a</sub>, -S(O)<sub>2</sub>R<sub>a</sub>, -OR<sub>k</sub>, -N(R<sub>a</sub>)(R<sub>b</sub>), -C(O)R<sub>a</sub>, -C(O)OR<sub>a</sub> and -C(O)NR<sub>a</sub>R<sub>b</sub>;

alternatively, R<sup>2</sup> and R<sup>3</sup>, together with the carbon atoms to which they are attached form a five- or six-membered ring selected from the group consisting of aryl, cycloalkyl, heteroaryl and heterocycle, wherein said aryl, cycloalkyl, heteroaryl and heterocycle is optionally substituted with (R<sup>6</sup>)<sub>m</sub>;

R<sup>4</sup> is selected from the group consisting of alkoxy, arylalkoxy, aryloxy, halo, hydroxy, R<sub>a</sub>R<sub>b</sub>N-, N<sub>3</sub>-, R<sub>c</sub>S-, wherein R<sup>4</sup> is independently substituted with 0, 1 or 2 substituents independently selected from the group consisting of halo, nitro, cyano, -OH, -NH<sub>2</sub>, and -COOH;

R<sup>5</sup> is independently selected at each occurrence from the group consisting of alkenyl, alkoxy, alkyl, alkynyl, aryl, arylalkyl, arylcarbonyl, aryloxy, azidoalkyl, formyl, halo, haloalkyl, halocarbonyl, heteroaryl, heteroarylalkyl, heterocycle, heterocyclealkyl, hydroxyalkyl, cycloalkyl, cyano, cyanoalkyl, nitro, R<sub>a</sub>R<sub>b</sub>N-, R<sub>a</sub>C(O)-, R<sub>a</sub>S-, R<sub>a</sub>(O)S-, R<sub>a</sub>(O)<sub>2</sub>S-, R<sub>a</sub>R<sub>b</sub>Nalkyl-, R<sub>a</sub>(O)SN(R<sub>f</sub>)-, R<sub>a</sub>SO<sub>2</sub>N(R<sub>f</sub>)-, R<sub>a</sub>(O)SN(R<sub>f</sub>)alkyl-, R<sub>a</sub>SO<sub>2</sub>N(R<sub>f</sub>)alkyl-, R<sub>a</sub>R<sub>b</sub>NSO<sub>2</sub>N(R<sub>f</sub>)-, R<sub>a</sub>R<sub>b</sub>NSO<sub>2</sub>N(R<sub>f</sub>)alkyl-, R<sub>a</sub>R<sub>b</sub>NC(O)-, R<sub>k</sub>OC(O)-, R<sub>k</sub>OC(O)alkyl-, R<sub>k</sub>Oalkyl-, R<sub>a</sub>R<sub>b</sub>NSO<sub>2</sub>-, R<sub>a</sub>R<sub>b</sub>NSO<sub>2</sub>alkyl-, (R<sub>b</sub>O)(R<sub>a</sub>)P(O)O- and -OR<sub>k</sub>, wherein each R<sup>5</sup> is independently substituted with 0, 1, 2 or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(OR<sub>c</sub>), -(alkyl)(NR<sub>c</sub>R<sub>d</sub>), -SR<sub>c</sub>, -S(O)R<sub>c</sub>, -S(O)<sub>2</sub>R<sub>c</sub>, -OR<sub>c</sub>, -N(R<sub>c</sub>)(R<sub>d</sub>), -C(O)R<sub>c</sub>, -C(O)OR<sub>c</sub> and -C(O)NR<sub>c</sub>R<sub>d</sub>;

R<sup>6</sup> is independently selected at each occurrence from the group consisting of alkyl, alkenyl, alkynyl, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, heterocyclealkyl, -(alkyl)(OR<sub>k</sub>), -(alkyl)(NR<sub>a</sub>R<sub>b</sub>), -SR<sub>a</sub>, -S(O)R<sub>a</sub>, -S(O)<sub>2</sub>R<sub>a</sub>, -OR<sub>k</sub>, -N(R<sub>a</sub>)(R<sub>b</sub>), -C(O)R<sub>a</sub>, -C(O)OR<sub>a</sub> and -C(O)NR<sub>a</sub>R<sub>b</sub>; wherein each R<sup>6</sup> is independently substituted with 0, 1, 2 or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, haloalkyl, cyano, nitro, -OR<sub>a</sub>, -NR<sub>a</sub>R<sub>b</sub>, -SR<sub>a</sub>, -SOR<sub>a</sub>, -SO<sub>2</sub>R<sub>a</sub>, -C(O)OR<sub>a</sub>, -C(O)NR<sub>a</sub>R<sub>b</sub> and -NC(O)R<sub>a</sub>;

R<sub>a</sub> and R<sub>b</sub>, at each occurrence, are independently selected from the group consisting of hydrogen, alkenyl, alkyl, alkylsulfanylalkyl, aryl, arylalkenyl, arylalkyl, cyanoalkyl, cycloalkenyl, cycloalkenylalkyl, cycloalkyl, cycloalkylalkyl, cycloalkylalkenyl, formylalkyl, haloalkyl, heteroaryl, heteroarylalkenyl, heteroarylalkyl, heterocycle, heterocyclealkenyl, heterocyclealkyl, hydroxyalkylcarbonyl, nitroalkyl, R<sub>c</sub>R<sub>d</sub>N-, R<sub>k</sub>O-, R<sub>k</sub>Oalkyl-, R<sub>c</sub>R<sub>d</sub>Nalkyl-, R<sub>c</sub>R<sub>d</sub>NC(O)alkyl-, R<sub>c</sub>SO<sub>2</sub>-, R<sub>c</sub>SO<sub>2</sub>alkyl-, R<sub>c</sub>C(O)-, R<sub>c</sub>C(O)alkyl-, R<sub>c</sub>OC(O)-, R<sub>c</sub>OC(O)alkyl-, R<sub>c</sub>R<sub>d</sub>NalkylC(O)-, R<sub>c</sub>R<sub>d</sub>NC(O)-,

$R_c R_d NC(O)Oalkyl-$ ,  $R_c R_d NC(O)N(R_e)alkyl-$ , wherein  $R_a$  and  $R_b$  are substituted with 0, 1 or 2 substituents selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(alkyl)(OR_e)$ ,  $-(alkyl)(NR_e R_d)$ ,  $-SR_e$ ,  $-S(O)R_e$ ,  $-S(O)_2 R_e$ ,  $-OR_e$ ,  $-N(R_e)(R_d)$ ,  $-C(O)R_e$ ,  $-C(O)OR_e$  and  $-C(O)NR_e R_d$ ;

alternatively,  $R_a$  and  $R_b$ , together with the nitrogen atom to which they are attached form a three- to six-membered ring selected from the group consisting of heteroaryl and heterocycle, wherein the heteroaryl and heterocycle are independently substituted with 0, 1, 2 or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(alkyl)(OR_e)$ ,  $-(alkyl)(NR_e R_d)$ ,  $-alkylSO_2 NR_e R_d$ ,  $-alkylC(O)NR_e R_d$ ,  $-SR_e$ ,  $-S(O)R_e$ ,  $-S(O)_2 R_e$ ,  $-OR_e$ ,  $-N(R_e)(R_d)$ ,  $-C(O)R_e$ ,  $-C(O)OR_e$  and  $-C(O)NR_e R_d$ ;

$R_e$  and  $R_d$ , at each occurrence, are independently selected from the group consisting of hydrogen,  $-NR_f R_h$ ,  $-OR_f$ ,  $-CO(R_f)$ ,  $-SR_f$ ,  $-SOR_f$ ,  $-SO_2 R_f$ ,  $-C(O)NR_f R_h$ ,  $-SO_2 NR_f R_h$ ,  $-C(O)OR_f$ , alkenyl, alkyl, alkynyl, cycloalkyl, cycloalkylalkyl, cycloalkenyl, cycloalkenylalkyl, aryl, arylalkyl, haloalkyl, heteroaryl, heteroarylalkyl, heterocycle and heterocyclealkyl; wherein each  $R_e$  and  $R_d$  is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(alkyl)(OR_f)$ ,  $-(alkyl)(NR_f R_h)$ ,  $-SR_f$ ,  $-S(O)R_f$ ,  $-S(O)_2 R_f$ ,  $-OR_f$ ,  $-N(R_f)(R_h)$ ,  $-C(O)R_f$ ,  $-C(O)OR_f$ ,  $-C(O)NR_f R_h$ ,  $-C(O)N(H)NR_f R_h$ ,  $-N(R_e)C(O)OR_f$ ,  $-N(R_e)SO_2 NR_f R_h$ ,  $-N(R_e)C(O)NR_f R_h$ ,  $-alkylN(R_e)C(O)OR_f$ ,  $-alkylN(R_e)SO_2 NR_f R_h$ , and  $-alkylN(R_e)C(O)NR_f R_h$ ;

alternatively,  $R_e$  and  $R_d$ , together with the nitrogen atom to which they are attached form a three- to six-membered ring selected from the group consisting of heteroaryl and heterocycle; wherein the heteroaryl and heterocycle are independently substituted with 0, 1, 2 or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(alkyl)(OR_f)$ ,  $-(alkyl)(NR_f R_h)$ ,  $-SR_f$ ,  $-S(O)R_f$ ,  $-S(O)_2 R_f$ ,  $-OR_f$ ,  $-N(R_f)(R_h)$ ,  $-C(O)R_f$ ,  $-C(O)OR_f$  and  $-C(O)NR_f R_h$ ;

$R_e$  is selected from the group consisting of hydrogen, alkenyl, alkyl and cycloalkyl;

$R_f$ ,  $R_g$  and  $R_h$ , at each occurrence, are independently selected from the group consisting of hydrogen, alkyl, alkenyl, aryl, arylalkyl, cycloalkyl, cycloalkylalkyl, cycloalkenyl, cycloalkenylalkyl, heterocycle, heterocyclealkyl, heteroaryl and heteroarylalkyl; wherein each  $R_f$ ,  $R_g$  and  $R_h$  is independently substituted with 0, 1, 2 or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, cyano, halo, oxo, nitro, aryl, arylalkyl, cycloalkyl, cycloalkenyl, heterocycle, heteroaryl,

heteroarylalkyl, -OH, -O(alkyl), -NH<sub>2</sub>, -N(H)(alkyl), -N(alkyl)<sub>2</sub>, -S(alkyl), -S(O)(alkyl), -SO<sub>2</sub>alkyl, -alkyl-OH, -alkyl-O-alkyl, -alkylNH<sub>2</sub>, -alkylN(H)(alkyl), -alkylN(alkyl)<sub>2</sub>, -alkylS(alkyl), -alkylS(O)(alkyl), -alkylSO<sub>2</sub>alkyl, -N(H)C(O)NH<sub>2</sub>, -C(O)OH, -C(O)O(alkyl), -C(O)alkyl, -C(O)NH<sub>2</sub>, -C(O)NH<sub>2</sub>, -C(O)N(H)(alkyl), and -C(O)N(alkyl)<sub>2</sub>;

alternatively, R<sub>f</sub> and R<sub>g</sub> together with the carbon atom to which they are attached form a three- to seven-membered ring selected from the group consisting of cycloalkyl, cycloalkenyl and heterocycle;

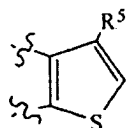
alternatively, R<sub>f</sub> and R<sub>h</sub> together with the nitrogen atom to which they are attached form a three- to seven-membered ring selected from the group consisting of heterocycle and heteroaryl; wherein each of the heterocycle and heteroaryl is independently substituted with 0, 1, 2 or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, cyano, halo, oxo, nitro, aryl, arylalkyl, cycloalkyl, cycloalkenyl, heterocycle, heteroaryl, heteroarylalkyl, -OH, -O(alkyl), -NH<sub>2</sub>, -N(H)(alkyl), -N(alkyl)<sub>2</sub>, -S(alkyl), -S(alkyl), -S(O)(alkyl), -alkyl-OH, -alkyl-O-alkyl, -alkylNH<sub>2</sub>, -alkylN(H)(alkyl), -alkylS(alkyl), -alkylS(O)(alkyl), -alkylSO<sub>2</sub>alkyl, -alkylN(alkyl)<sub>2</sub>, -N(H)C(O)NH<sub>2</sub>, -C(O)OH, -C(O)O(alkyl), -C(O)alkyl, -C(O)NH<sub>2</sub>, -C(O)NH<sub>2</sub>, -C(O)N(H)(alkyl), and -C(O)N(alkyl)<sub>2</sub>;

R<sub>k</sub> is selected from the group consisting of hydrogen, alkenyl, alkyl, aryl, arylalkyl, cyanoalkyl, cycloalkenyl, cycloalkenylalkyl, cycloalkyl, cycloalkylalkyl, formylalkyl, haloalkyl, heteroaryl, heteroarylalkyl, heterocycle, heterocyclealkyl, nitroalkyl, R<sub>a</sub>R<sub>b</sub>Nalkyl-, R<sub>a</sub>Oalkyl-, R<sub>a</sub>R<sub>b</sub>NC(O)-, R<sub>a</sub>R<sub>b</sub>NC(O)alkyl-, R<sub>a</sub>S-, R<sub>a</sub>S(O)-, R<sub>a</sub>SO<sub>2</sub>-, R<sub>a</sub>Salkyl-, R<sub>a</sub>(O)Salkyl-, R<sub>a</sub>SO<sub>2</sub>alkyl-, R<sub>a</sub>OC(O)-, R<sub>a</sub>OC(O)alkyl-, R<sub>a</sub>C(O)-, R<sub>a</sub>C(O)alkyl-, wherein each R<sub>k</sub> is substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(OR<sub>c</sub>), -(alkyl)(NR<sub>c</sub>R<sub>d</sub>), -SR<sub>c</sub>, -S(O)R<sub>c</sub>, -S(O)<sub>2</sub>R<sub>c</sub>, -OR<sub>c</sub>, -N(R<sub>c</sub>)(R<sub>d</sub>), -C(O)R<sub>c</sub>, -C(O)OR<sub>c</sub> and -C(O)NR<sub>c</sub>R<sub>d</sub>;

m is 0, 1, 2, 3, or 4; and

n is 0, 1, 2, 3, or 4;

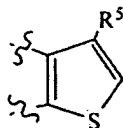
with the proviso that when A is a monocyclic ring other than



and R<sup>4</sup> is alkoxy, aryloxy, hydroxy or R<sub>c</sub>S-, and R<sup>5</sup> is hydrogen, alkenyl, alkoxy, alkyl, alkynyl, aryl, halo, heteroaryl, heterocyclealkyl, cycloalkyl, cyano, nitro, R<sub>a</sub>R<sub>b</sub>N-, R<sub>a</sub>C(O)-, R<sub>a</sub>S-, R<sub>a</sub>(O)S-, R<sub>a</sub>(O)<sub>2</sub>S-, R<sub>a</sub>SO<sub>2</sub>N(R<sub>f</sub>)-, R<sub>a</sub>R<sub>b</sub>NC(O)-, R<sub>k</sub>OC(O)-, R<sub>a</sub>R<sub>b</sub>NSO<sub>2</sub>- or -OR<sub>k</sub>, and R<sup>6</sup> is hydrogen, alkyl, alkenyl, alkynyl, halo, cyano, nitro, aryl, heteroaryl, heterocyclealkyl, -SR<sub>a</sub>, -S(O)R<sub>a</sub>, -S(O)<sub>2</sub>R<sub>a</sub>, -OR<sub>k</sub>, -N(R<sub>a</sub>)(R<sub>b</sub>), -C(O)R<sub>a</sub>,

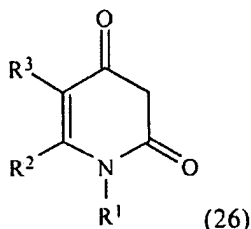
$-C(O)OR_a$  and  $-C(O)NR_aR_b$ , then  $R^1$  is not hydrogen, alkenyl, alkyl, alkynyl, aryl, arylalkenyl, arylalkyl, cycloalkyl, (cycloalkyl)alkenyl, (cycloalkyl)alkyl, heteroaryl, heteroarylalkenyl, heteroarylalkyl, heterocyclealkenyl or heterocyclealkyl;

and with the further proviso that when A is

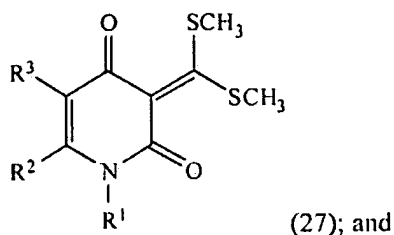


and  $R^4$  is hydroxy or  $R_eS-$ , and  $R^5$  is hydrogen, unsubstituted alkyl, halo or  $-OR_k$ , and  $R^6$  is hydrogen, alkyl, alkenyl, alkynyl, halo, cyano, nitro, aryl, heteroaryl, heterocyclealkyl,  $-SR_a$ ,  $-S(O)R_a$ ,  $-S(O)_2R_a$ ,  $-OR_k$ ,  $-N(R_a)(R_b)$ ,  $-C(O)R_a$ ,  $-C(O)OR_a$  and  $-C(O)NR_aR_b$ , then  $R^1$  is not hydrogen, alkenyl, alkyl, alkynyl, aryl, arylalkenyl, arylalkyl, cycloalkyl, (cycloalkyl)alkenyl, (cycloalkyl)alkyl, heteroaryl, heteroarylalkenyl, heteroarylalkyl, heterocyclealkenyl or heterocyclealkyl; comprising:

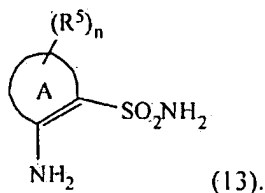
(a) contacting a compound of formula (26)



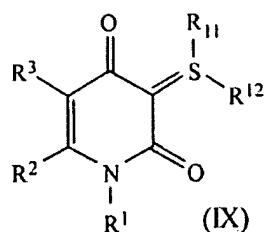
with tris(methylthio)methyl methyl sulfate in the presence of a base to provide a compound of formula (27)



(b) contacting the compound of formula (27) with a compound of formula (13)



87. (withdrawn) A compound having formula (IX),



or a pharmaceutically acceptable salt form, tautomer or stereoisomer thereof, wherein

$R^1$  is selected from the group consisting of hydrogen, alkenyl, alkoxyalkyl, alkoxycarbonylalkyl, alkyl, alkylcarbonylalkyl, alkylsulfanylalkyl, alkylsulfinylalkyl, alkylsulfonylalkyl, alkynyl, aryl, arylalkenyl, arylalkyl, arylsulfanylalkyl, arylsulfonylalkyl, carboxyalkyl, cyanoalkyl, cycloalkenyl, cycloalkenylalkyl, cycloalkyl, (cycloalkyl)alkenyl, (cycloalkyl)alkyl, formylalkyl, haloalkoxyalkyl, haloalkyl, heteroaryl, heteroarylalkenyl, heteroarylalkyl, heteroarylsulfonylalkyl, heterocycle, heterocyclealkenyl, heterocyclealkyl, hydroxyalkyl, nitroalkyl,  $R_aR_bN-$ ,  $R_aR_bNalkyl-$ ,  $R_aR_bNC(O)alkyl-$ ,  $R_aR_bNC(O)Oalkyl-$ ,  $R_aR_bNC(O)NR_calkyl-$ ,  $R_rR_sC=N-$  and  $R_kO-$ , wherein  $R^1$  is independently substituted with 0, 1, 2 or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(alkyl)(OR_c)$ ,  $-(alkyl)(NR_cR_c)$ ,  $-SR_c$ ,  $-S(O)R_c$ ,  $-S(O)_2R_c$ ,  $-OR_c$ ,  $-N(R_c)(R_c)$ ,  $-C(O)R_c$ ,  $-C(O)OR_c$  and  $-C(O)NR_cR_c$ ;

$R^2$  and  $R^3$  are independently selected from the group consisting of hydrogen, alkenyl, alkynyl, alkoxyalkyl, alkoxycarbonyl, alkyl, aryl, arylalkyl, heteroaryl, heterocycle, heteroarylalkyl, cyano, halo,  $-N(R_a)(R_b)$ ,  $R_aR_bNC(O)-$ ,  $-SR_a$ ,  $-S(O)R_a$ ,  $-S(O)_2R_a$  and  $R_aC(O)-$ ; wherein  $R^2$  and  $R^3$  are independently substituted with 0, 1, 2 or 3 substituents independently selected from the group consisting of  $R_a$ , alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl,  $-(alkyl)(OR_k)$ ,  $-(alkyl)(NR_aR_b)$ ,  $-SR_a$ ,  $-S(O)R_a$ ,  $-S(O)_2R_a$ ,  $-OR_k$ ,  $-N(R_a)(R_b)$ ,  $-C(O)R_a$ ,  $-C(O)OR_a$  and  $-C(O)NR_aR_b$ ;

alternatively,  $R^2$  and  $R^3$ , together with the carbon atoms to which they are attached form a five- or six-membered ring selected from the group consisting of aryl, cycloalkyl, heteroaryl and heterocycle, wherein said aryl, cycloalkyl, heteroaryl and heterocycle is optionally substituted with  $(R^6)_m$ ;

$R^6$  is independently selected at each occurrence from the group consisting of alkyl, alkenyl, alkynyl, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, heterocyclealkyl,  $-(alkyl)(OR_k)$ ,  $-(alkyl)(NR_aR_b)$ ,  $-SR_a$ ,  $-S(O)R_a$ ,  $-S(O)_2R_a$ ,  $-OR_k$ ,  $-N(R_a)(R_b)$ ,  $-C(O)R_a$ ,  $-C(O)OR_a$  and  $-C(O)NR_aR_b$ ; wherein each  $R^6$  is independently substituted with 0, 1, 2 or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, haloalkyl, cyano, nitro,  $-OR_a$ ,  $-NR_aR_b$ ,  $-SR_a$ ,  $-SOR_a$ ,  $-SO_2R_a$ ,  $-C(O)OR_a$ ,  $-C(O)NR_aR_b$  and  $-NC(O)R_a$ ;



$R_a$  and  $R_b$ , at each occurrence, are independently selected from the group consisting of hydrogen, alkenyl, alkyl, alkylsulfanylalkyl, aryl, arylalkenyl, arylalkyl, cyanoalkyl, cycloalkenyl, cycloalkenylalkyl, cycloalkyl, cycloalkylalkyl, cycloalkylalkenyl, formylalkyl, haloalkyl, heteroaryl, heteroarylalkenyl, heteroarylalkyl, heterocycle, heterocyclealkenyl, heterocyclealkyl, hydroxyalkylcarbonyl, nitroalkyl,  $R_cR_dN-$ ,  $R_kO-$ ,  $R_kOalkyl-$ ,  $R_cR_dNalkyl-$ ,  $R_cR_dNC(O)alkyl-$ ,  $R_cSO_2-$ ,  $R_cSO_2alkyl-$ ,  $R_cC(O)-$ ,  $R_cC(O)alkyl-$ ,  $R_cOC(O)-$ ,  $R_cOC(O)alkyl-$ ,  $R_cR_dNalkylC(O)-$ ,  $R_cR_dNC(O)-$ ,  $R_cR_dNC(O)Oalkyl-$ ,  $R_cR_dNC(O)N(R_c)alkyl-$ , wherein  $R_a$  and  $R_b$  are substituted with 0, 1 or 2 substituents selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(alkyl)(OR_c)$ ,  $-(alkyl)(NR_cR_d)$ ,  $-SR_c$ ,  $-S(O)R_c$ ,  $-S(O)_2R_c$ ,  $-OR_c$ ,  $-N(R_c)(R_d)$ ,  $-C(O)R_c$ ,  $-C(O)OR_c$  and  $-C(O)NR_cR_d$ ;

alternatively,  $R_a$  and  $R_b$ , together with the nitrogen atom to which they are attached form a three- to six-membered ring selected from the group consisting of heteroaryl and heterocycle, wherein the heteroaryl and heterocycle are independently substituted with 0, 1, 2 or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(alkyl)(OR_c)$ ,  $-(alkyl)(NR_cR_d)$ ,  $-alkylSO_2NR_cR_d$ ,  $-alkylC(O)NR_cR_d$ ,  $-SR_c$ ,  $-S(O)R_c$ ,  $-S(O)_2R_c$ ,  $-OR_c$ ,  $-N(R_c)(R_d)$ ,  $-C(O)R_c$ ,  $-C(O)OR_c$  and  $-C(O)NR_cR_d$ ;

$R_c$  and  $R_d$ , at each occurrence, are independently selected from the group consisting of hydrogen,  $-NR_iR_h$ ,  $-OR_i$ ,  $-CO(R_i)$ ,  $-SR_i$ ,  $-SOR_i$ ,  $-SO_2R_i$ ,  $-C(O)NR_iR_h$ ,  $-SO_2NR_iR_h$ ,  $-C(O)OR_i$ , alkenyl, alkyl, alkynyl, cycloalkyl, cycloalkylalkyl, cycloalkenyl, cycloalkenylalkyl, aryl, arylalkyl, haloalkyl, heteroaryl, heteroarylalkyl, heterocycle and heterocyclealkyl; wherein each  $R_c$  and  $R_d$  is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(alkyl)(OR_i)$ ,  $-(alkyl)(NR_iR_h)$ ,  $-SR_i$ ,  $-S(O)R_i$ ,  $-S(O)_2R_i$ ,  $-OR_i$ ,  $-N(R_i)(R_h)$ ,  $-C(O)R_i$ ,  $-C(O)OR_i$ ,  $-C(O)NR_iR_h$ ,  $-C(O)N(H)NR_iR_h$ ,  $-N(R_c)C(O)OR_i$ ,  $-N(R_c)SO_2NR_iR_h$ ,  $-N(R_c)C(O)NR_iR_h$ ,  $-alkylN(R_c)C(O)OR_i$ ,  $-alkylN(R_c)SO_2NR_iR_h$ , and  $-alkylN(R_c)C(O)NR_iR_h$ ;

alternatively,  $R_c$  and  $R_d$ , together with the nitrogen atom to which they are attached form a three- to six-membered ring selected from the group consisting of heteroaryl and heterocycle, wherein the heteroaryl and heterocycle are independently substituted with 0, 1, 2 or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(alkyl)(OR_i)$ ,  $-(alkyl)(NR_iR_h)$ ,  $-SR_i$ ,  $-S(O)R_i$ ,  $-S(O)_2R_i$ ,  $-OR_i$ ,  $-N(R_i)(R_h)$ ,  $-C(O)R_i$ ,  $-C(O)OR_i$  and  $-C(O)NR_iR_h$ ;

R<sub>c</sub> is selected from the group consisting of hydrogen, alkenyl, alkyl and cycloalkyl;

R<sub>f</sub>, R<sub>g</sub> and R<sub>h</sub>, at each occurrence, are independently selected from the group consisting of hydrogen, alkyl, alkenyl, aryl, arylalkyl, cycloalkyl, cycloalkylalkyl, cycloalkenyl, cycloalkenylalkyl, heterocycle, heterocyclealkyl, heteroaryl and heteroarylalkyl; wherein each R<sub>f</sub>, R<sub>g</sub> and R<sub>h</sub> is independently substituted with 0, 1, 2 or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, cyano, halo, oxo, nitro, aryl, arylalkyl, cycloalkyl, cycloalkenyl, heterocycle, heteroaryl, heteroarylalkyl, -OH, -O(alkyl), -NH<sub>2</sub>, -N(H)(alkyl), -N(alkyl)<sub>2</sub>, -S(alkyl), -S(O)(alkyl), -SO<sub>2</sub>alkyl, -alkyl-OH, -alkyl-O-alkyl, -alkylNH<sub>2</sub>, -alkylN(H)(alkyl), -alkylN(alkyl)<sub>2</sub>, -alkylS(alkyl), -alkylS(O)(alkyl), -alkylSO<sub>2</sub>alkyl, -N(H)C(O)NH<sub>2</sub>, -C(O)OH, -C(O)O(alkyl), -C(O)alkyl, -C(O)NH<sub>2</sub>, -C(O)NH<sub>2</sub>, -C(O)N(H)(alkyl), and -C(O)N(alkyl)<sub>2</sub>;

alternatively, R<sub>f</sub> and R<sub>g</sub> together with the carbon atom to which they are attached form a three- to seven-membered ring selected from the group consisting of cycloalkyl, cycloalkenyl and heterocycle;

alternatively, R<sub>f</sub> and R<sub>h</sub> together with the nitrogen atom to which they are attached form a three- to seven-membered ring selected from the group consisting of heterocycle and heteroaryl; wherein each of the heterocycle and heteroaryl is independently substituted with 0, 1, 2 or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, cyano, halo, oxo, nitro, aryl, arylalkyl, cycloalkyl, cycloalkenyl, heterocycle, heteroaryl, heteroarylalkyl, -OH, -O(alkyl), -NH<sub>2</sub>, -N(H)(alkyl), -N(alkyl)<sub>2</sub>, -S(alkyl), -S(alkyl), -S(O)(alkyl), -alkyl-OH, -alkyl-O-alkyl, -alkylNH<sub>2</sub>, -alkylN(H)(alkyl), -alkylS(alkyl), -alkylS(O)(alkyl), -alkylSO<sub>2</sub>alkyl, -alkylN(alkyl)<sub>2</sub>, -N(H)C(O)NH<sub>2</sub>, -C(O)OH, -C(O)O(alkyl), -C(O)alkyl, -C(O)NH<sub>2</sub>, -C(O)NH<sub>2</sub>, -C(O)N(H)(alkyl), and -C(O)N(alkyl)<sub>2</sub>;

R<sub>k</sub> is selected from the group consisting of hydrogen, alkenyl, alkyl, aryl, arylalkyl, cyanoalkyl, cycloalkenyl, cycloalkenylalkyl, cycloalkyl, cycloalkylalkyl, formylalkyl, haloalkyl, heteroaryl, heteroarylalkyl, heterocycle, heterocyclealkyl, nitroalkyl, R<sub>a</sub>R<sub>b</sub>Nalkyl-, R<sub>a</sub>Oalkyl-, R<sub>a</sub>R<sub>b</sub>NC(O)-, R<sub>a</sub>R<sub>b</sub>NC(O)alkyl-, R<sub>a</sub>S-, R<sub>a</sub>S(O)-, R<sub>a</sub>SO<sub>2</sub>-, R<sub>a</sub>Salkyl-, R<sub>a</sub>(O)Salkyl-, R<sub>a</sub>SO<sub>2</sub>alkyl-, R<sub>a</sub>OC(O)-, R<sub>a</sub>OC(O)alkyl-, R<sub>a</sub>C(O)-, R<sub>a</sub>C(O)alkyl-, wherein each R<sub>k</sub> is substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(OR<sub>c</sub>), -(alkyl)(NR<sub>c</sub>R<sub>d</sub>), -SR<sub>c</sub>, -S(O)R<sub>c</sub>, -S(O)<sub>2</sub>R<sub>c</sub>, -OR<sub>c</sub>, -N(R<sub>c</sub>)(R<sub>d</sub>), -C(O)R<sub>c</sub>, -C(O)OR<sub>c</sub> and -C(O)NR<sub>c</sub>R<sub>d</sub>;

m is 0, 1, 2, 3, or 4; and

R<sup>11</sup> and R<sup>12</sup> are independently selected from the group consisting of alkyl, alkenyl and alkynyl.

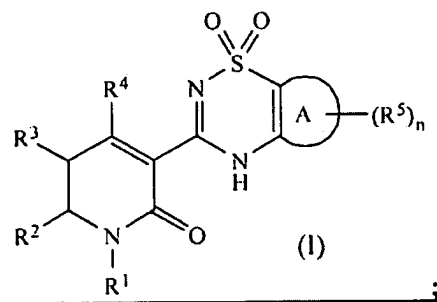
88. **(withdrawn)** The compound of claim 87, or a pharmaceutically acceptable salt form, tautomer or stereoisomer thereof selected from the group consisting of:

1-benzyl-3-(bis(methylthio)methylene)-1H-quinoline-2,4(1H,3H)-dione;  
3-[bis(methylthio)methylene]-1-butyl-1,8-naphthyridine-2,4(1H,3H)-dione;  
3-[bis(methylthio)methylene]-1-(1,3-dioxo-1,3-dihydro-2H-isoindol-2-yl)quinoline-2,4(1H,3H)-  
dione;  
3-[bis(methylthio)methylene]-1-[(cyclopropylmethyl)amino]quinoline-2,4(1H,3H)-dione;  
3-[bis(methylthio)methylene]-1-(3-methylbutyl)pyridine-2,4(1H,3H)-dione;  
1-benzyl-3-[bis(methylthio)methylene]pyridine-2,4(1H,3H)-dione;  
3-[bis(methylthio)methylene]-1-(cyclobutylamino)quinoline-2,4(1H,3H)-dione; and  
3-[bis(methylthio)methylene]-1-(cyclobutylmethyl)pyridine-2,4(1H,3H)-dione.

89. (canceled)

90. (currently amended) [[The]] A compound, or a pharmaceutically acceptable salt,  
stereoisomer, or tautomer ~~of claim 1~~ thereof, wherein:

the compound corresponds in structure to formula (I):



A is a monocyclic or bicyclic ring selected from the group consisting of aryl, cycloalkyl, cycloalkenyl, heteroaryl, and heterocycle;

$R^1$  is  $R_aR_bN-$ ; [[, and]]

$R^2$  and  $R^3$ , together with the carbon atoms to which they are attached, form a five- or six-membered ring selected from the group consisting of aryl, cycloalkyl, heteroaryl, and heterocycle; ~~and~~  
**wherein**

$R^5$  is independently selected at each occurrence from the group consisting of alkenyl, alkoxy, alkyl, alkynyl, aryl, arylalkyl, arylcarbonyl, aryloxy, azidoalkyl, formyl, halo, haloalkyl, halocarbonyl, heteroaryl, heteroarylalkyl, heterocycle, heterocyclealkyl, hydroxyalkyl, cycloalkyl, cyano, cyanoalkyl, nitro,  $R_aR_bN-$ ,  $R_aC(O)-$ ,  $R_aS-$ ,  $R_a(O)S-$ ,  $R_a(O)_2S-$ ,  $R_aR_bNalkyl-$ ,  $R_a(O)SN(R_f)-$ ,  $R_aSO_2N(R_f)-$ ,  $R_a(O)SN(R_f)alkyl-$ ,  $R_aSO_2N(R_f)alkyl-$ ,  $R_aR_bNSO_2N(R_f)-$ ,  $R_aR_bNSO_2N(R_f)alkyl-$ ,  $R_aR_bNC(O)-$ ,  $R_kOC(O)-$ ,  $R_kOC(O)alkyl-$ ,  $R_kOalkyl-$ ,  $R_aR_bNSO_2-$ ,  $R_aR_bNSO_2alkyl-$ ,

$(R_bO)(R_c)P(O)O-$  and  $-OR_k$ , wherein each  $R^5$  is independently substituted with 0, 1, 2 or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(alkyl)(OR_c)$ ,  $-(alkyl)(NR_cR_d)$ ,  $-SR_c$ ,  $-S(O)R_c$ ,  $-S(O)_2R_c$ ,  $-OR_c$ ,  $-N(R_c)(R_d)$ ,  $-C(O)R_c$ ,  $-C(O)OR_c$  and  $-C(O)NR_cR_d$ ;

$R_a$  and  $R_b$ , at each occurrence, are independently selected from the group consisting of hydrogen, alkenyl, alkyl, alkylsulfanylalkyl, aryl, arylalkenyl, arylalkyl, cyanoalkyl, cycloalkenyl, cycloalkenylalkyl, cycloalkyl, cycloalkylalkyl, cycloalkylalkenyl, formylalkyl, haloalkyl, heteroaryl, heteroarylalkenyl, heteroarylalkyl, heterocycle, heterocyclealkenyl, heterocyclealkyl, hydroxyalkylcarbonyl, and nitroalkyl;

$R_c$  and  $R_d$ , at each occurrence, are independently selected from the group consisting of hydrogen,  $-NR_fR_b$ ,  $-OR_f$ ,  $-CO(R_f)$ ,  $-SR_f$ ,  $-SOR_f$ ,  $-SO_2R_f$ ,  $-C(O)NR_fR_b$ ,  $-SO_2NR_fR_b$ ,  $-C(O)OR_f$ , alkenyl, alkyl, alkynyl, cycloalkyl, cycloalkylalkyl, cycloalkenyl, cycloalkenylalkyl, aryl, arylalkyl, haloalkyl, heteroaryl, heteroarylalkyl, heterocycle, and heterocycloalkyl, wherein each  $R_c$  and  $R_d$  is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(alkyl)(OR_f)$ ,  $-(alkyl)(NR_fR_b)$ ,  $-SR_f$ ,  $-S(O)R_f$ ,  $-S(O)_2R_f$ ,  $-OR_f$ ,  $-N(R_f)(R_b)$ ,  $-C(O)R_f$ ,  $-C(O)OR_f$ ,  $-C(O)NR_fR_b$ ,  $-C(O)N(H)NR_fR_b$ ,  $-N(R_c)C(O)OR_f$ ,  $-N(R_c)SO_2NR_fR_b$ ,  $-N(R_c)C(O)NR_fR_b$ ,  $-alkylN(R_c)C(O)OR_f$ ,  $-alkylN(R_c)SO_2NR_fR_b$ , and  $-alkylN(R_c)C(O)NR_fR_b$ ;

alternatively,  $R_c$  and  $R_d$ , together with the nitrogen atom to which they are attached, form a three- to six-membered ring selected from the group consisting of heteroaryl and heterocycle, wherein the heteroaryl and heterocycle are independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl,  $-(alkyl)(OR_f)$ ,  $-(alkyl)(NR_fR_b)$ ,  $-SR_f$ ,  $-S(O)R_f$ ,  $-S(O)_2R_f$ ,  $-OR_f$ ,  $-N(R_f)(R_b)$ ,  $-C(O)R_f$ ,  $-C(O)OR_f$  and  $-C(O)NR_fR_b$ ;

$R_e$  is selected from the group consisting of hydrogen, alkenyl, alkyl, and cycloalkyl;

$R_f$  and  $R_b$ , at each occurrence, are independently selected from the group consisting of hydrogen, alkyl, alkenyl, aryl, arylalkyl, cycloalkyl, cycloalkylalkyl, cycloalkenyl, cycloalkenylalkyl, heterocycle, heterocyclealkyl, heteroaryl, and heteroarylalkyl, wherein each  $R_f$ ,  $R_e$ , and  $R_b$  is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, cyano, halo, oxo, nitro, aryl, arylalkyl, cycloalkyl, cycloalkenyl,

heterocycle, heteroaryl, heteroarylalkyl, -OH, -O(alkyl), -NH<sub>2</sub>, -N(H)(alkyl), -N(alkyl)<sub>2</sub>, -S(alkyl), -S(O)(alkyl), -SO<sub>2</sub>alkyl, -alkyl-OH, -alkyl-O-alkyl, -alkylNH<sub>2</sub>, -alkylN(H)(alkyl), -alkylN(alkyl)<sub>2</sub>, -alkylS(alkyl), -alkylS(O)(alkyl), -alkylSO<sub>2</sub>alkyl, -N(H)C(O)NH<sub>2</sub>, -C(O)OH, -C(O)O(alkyl), -C(O)alkyl, -C(O)NH<sub>2</sub>, -C(O)NH<sub>2</sub>, -C(O)N(H)(alkyl), and -C(O)N(alkyl)<sub>2</sub>;

alternatively, R<sub>f</sub> and R<sub>h</sub>, together with the nitrogen atom to which they are attached, form a three- to seven-membered ring selected from the group consisting of heterocycle and heteroaryl, wherein each of the heterocycle and heteroaryl is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, cyano, halo, oxo, nitro, aryl, arylalkyl, cycloalkyl, cycloalkenyl, heterocycle, heteroaryl, heteroarylalkyl, -OH, -O(alkyl), -NH<sub>2</sub>, -N(H)(alkyl), -N(alkyl)<sub>2</sub>, -S(alkyl), -S(alkyl), -S(O)(alkyl), -alkyl-OH, -alkyl-O-alkyl, -alkylNH<sub>2</sub>, -alkylN(H)(alkyl), -alkylS(alkyl), -alkylS(O)(alkyl), -alkylSO<sub>2</sub>alkyl, -alkylN(alkyl)<sub>2</sub>, -N(H)C(O)NH<sub>2</sub>, -C(O)OH, -C(O)O(alkyl), -C(O)alkyl, -C(O)NH<sub>2</sub>, -C(O)NH<sub>2</sub>, -C(O)N(H)(alkyl), and -C(O)N(alkyl)<sub>2</sub>;

R<sub>k</sub> is selected from the group consisting of hydrogen, alkenyl, alkyl, aryl, arylalkyl, cyanoalkyl, cycloalkenyl, cycloalkenylalkyl, cycloalkyl, cycloalkylalkyl, formylalkyl, haloalkyl, heteroaryl, heteroarylalkyl, heterocycle, heterocyclealkyl, nitroalkyl, R<sub>a</sub>R<sub>b</sub>Nalkyl-, R<sub>a</sub>Oalkyl-, R<sub>a</sub>R<sub>b</sub>NC(O)-, R<sub>a</sub>R<sub>b</sub>NC(O)alkyl, R<sub>a</sub>S-, R<sub>a</sub>S(O)-, R<sub>a</sub>SO<sub>2</sub>-, R<sub>a</sub>Salkyl-, R<sub>a</sub>(O)Salkyl-, R<sub>a</sub>SO<sub>2</sub>alkyl-, R<sub>a</sub>OC(O)-, R<sub>a</sub>OC(O)alkyl-, R<sub>a</sub>C(O)-, and R<sub>a</sub>C(O)alkyl-, wherein each R<sub>k</sub> is substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(OR<sub>c</sub>), -(alkyl)(NR<sub>c</sub>R<sub>d</sub>), -SR<sub>c</sub>-, -S(O)R<sub>c</sub>-, -S(O)<sub>2</sub>R<sub>c</sub>-, -OR<sub>c</sub>-, -N(R<sub>c</sub>)(R<sub>d</sub>), -C(O)R<sub>c</sub>-, -C(O)OR<sub>c</sub> and -C(O)NR<sub>c</sub>R<sub>d</sub>; and

n is 0, 1, 2, 3, or 4.

91. (currently amended) The compound, salt, stereoisomer, or tautomer of claim 25, wherein:

R<sup>5</sup> is R<sub>a</sub>SO<sub>2</sub>N(R<sub>f</sub>)alkyl-, and

R<sub>a</sub> and R<sub>b</sub>, at each occurrence, are independently selected from the group consisting of hydrogen, alkenyl, alkyl, alkylsulfanylalkyl, aryl, arylalkenyl, arylalkyl, cyanoalkyl, cycloalkenyl, cycloalkenylalkyl, cycloalkyl, cycloalkylalkyl, cycloalkylalkenyl, formylalkyl, haloalkyl, heteroaryl, heteroarylalkenyl, heteroarylalkyl, heterocycle, heterocyclealkenyl, heterocyclealkyl, hydroxyalkylcarbonyl, and nitroalkyl.

92. (currently amended) The compound, salt, stereoisomer, or tautomer of claim 25, wherein:

R<sup>1</sup> is R<sub>a</sub>R<sub>b</sub>N-, and

$R_a$  and  $R_b$ , at each occurrence, are independently selected from the group consisting of hydrogen, alkenyl, alkyl, alkylsulfanylalkyl, aryl, arylalkenyl, arylalkyl, cyanoalkyl, cycloalkenyl, cycloalkenylalkyl, cycloalkyl, cycloalkylalkyl, cycloalkylalkenyl, formylalkyl, haloalkyl, heteroaryl, heteroarylalkenyl, heteroarylalkyl, heterocycle, heterocyclealkenyl, heterocyclealkyl, hydroxyalkylcarbonyl, and nitroalkyl.